L1190500002 - Madison County
CLARK OIL & REFINING
ILD 041839023
SF/HRS
Vol. 1 of 2

CERCLA

Expanded Site Inspection

Illinois Environmental
Protection Agency

EXPANDED SITE INSPECTION REPORT

for:

CLARK OIL & REFINING COMPANY
HARTFORD, ILLINOIS

ILD 041869023

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
FEDERAL SITE REMEDIATION SECTION
SITE ASSESSMENT UNIT

SEPTEMBER 2001

EXPANDED SITE INSPECTION REPORT
CLARK OIL & REFINING COMPANY

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1.0 SITE BACKGROUND

1.1 INTRODUCTION

On September 30, 2000, the Illinois Environmental Protection Agency's (IEPA) Site Assessment Program was tasked by the U.S. Environmental Protection Agency (U.S. EPA) to conduct an Expanded Site Investigation (ESI) of the Clark Oil & Refining Company (currently named Premcor (The Premcor Refining Group Inc.)) (ILD041869023) site located in Hartford, Illinois. The ESI is performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

On August 3, 1991 Clark Oil was placed on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) in response to concerns that past and current site activities may have resulted in the release of chemical substances, associated with oil refining processes, into the environment. The substances had the potential to enter the environment through four environmental pathways; groundwater, surface water, soil exposure and air releases thereby endangering the life and health of wildlife and human populations. The potential for contamination exists both onsite and in nearby offsite locations. This potential stems from a number of factors as follows: The refinery has been active as a refinery for over 60 years; disposal of leaded still bottoms on site in unlined pits; the occurrence of multiple leaks and spills, free product existing on groundwater beneath the site and local residences west of site; disposal of various production wastes in an unlined landfill area on Clark Oil property west of the Army Corp of Engineers flood control levee; two of Hartford's public drinking water wells have been found to be contaminated with various volatile organic

compounds including BTEX constituents.

The Illinois EPA conducted a Preliminary Assessment at the site on June 4, 1992 and a Screening Site Inspection on March 31 and April 1, 1993. Personnel of Illinois EPA's Site Assessment Unit prepared a work plan for ESI field activities, which was submitted to U.S. EPA on October 17, 2000. The field activity portion of the ESI was conducted on November 1, 2, and 9, 2000. The activities of the ESI included a reconnaissance inspection, an internal file review, information collected from external sources and the collection of thirty soil samples. Twenty-eight samples were collected from Clark Oil & Refining property; two (the soil background) were collected on Roxanna Water Department property. No sediment or groundwater samples were collected during the November 1, 2 and 9, 2000 sampling event. However, twenty-four groundwater samples (monitor wells) were collected from plant property on May 21 - 23, 2001 by personnel from the IEPA's Collinsville field office. Samples were collected in conjunction with Clark Oil's quarterly groundwater sampling requirement. Duplicate and background samples of each media are included in the number of samples mentioned above.

The Illinois EPA performed ESI activities at the site to fill information gaps which existed from previous CERCLA investigations and to determine whether, or to what extent, the site poses a threat to human health and the environment. The ESI report presents the results of Illinois EPA's evaluation and summarizes the site conditions and targets of concern to the migration and exposure pathways associated with the site.

1.2 SITE DESCRIPTION

The Clark Oil & Refining site is located at the east corporate boundary of the City of

Hartford, Illinois on property with the address of 201 East Hawthorne South (State Aid Route 11A) Wood River Township, Madison County (Figures 1 & 2). The site is an operating petroleum refinery, which consists of numerous process structures, piping, and holding tanks for crude oil and finished product. Clark Oil & Refining Company is one of three oil refineries in the immediate area east and north of the Village of Hartford. General land use surrounding the residential areas of the Village is industrial. A few commercial businesses are located within Hartford. Refinery property encompasses a total of approximately 420 acres. Refinery operations occupy approximately 270 acres west of Illinois Route 111 and east of the Village of Hartford. Refinery operations are located in Sections 34 and 35 Township 5 North - Range 9 West and Section 3 Township 4 North - Range 9 West. Clark Oil property also includes old wastewater treatment lagoons located on approximately 150 acres west of refinery operations and west of the Corp of Engineers Mississippi River flood control levee. Three and one half of the four lagoons on this property currently contain water. Half of the fourth lagoon has been utilized as a repository for the Village of Hartford's landscape waste and light demolition debris. This property is located in Section 33 Township 5 North - Range 9 West and Section 4 Township 4 North - Range 9 West. The refining processes portion of Clark Oil property is situated in the S 1/2 of Section 34 T.5N. - R.9W. and the SW 1/4, SW 1/4 of Section 35 T.5N. - R.9W. (Figure 2). This portion of the property lies within the eastern corporate limits of Hartford. Bordering the refinery portion of the site to the north is the Illinois Terminal Railroad across which is the Amoco Oil Refinery, south by Hawthorne Street (State Aid Route 11A) across which is one of Shell Oils' tank farms, east by Illinois Route 111 across which is the Shell Oil Refinery and west by the Penn Central, Burlington Northern, and Illinois Central Gulf Railroads beyond which is

the Village of Hartford. The old wastewater treatment lagoons are situated in SW 1/4, SE 1/4 of Section 33 T.5N. - R. 9W. and the W 1/2, NE 1/4 of Section 4 T.4N. - R.9W. (Figure 2). This property lies west of the Hartford corporate limits and west of Route 3. Bordering this portion of Clark property to the north are settling basins who's owner is unknown by this author, south by open ground, east by the Mississippi River flood control levee, and west by the Mississippi River. The Clark Oil & Refinery site is situated in an area that has been used as industrial or commercial since the early 1900's. Residential property exists to the north-northeast (Wood River and Roxana), west and southwest (Hartford), and southeast South Roxana) of the refinery property. Single-family residences make up the majority of the residential property within four miles of Clark Oil. Multi-family dwellings are interspersed within these urban residential areas. Also, some areas near the Clark refinery remain as pasture or farmland, generally south, southwest, and southeast.

Clark Oil & Refining has been active as a refinery since 1941. Current site structures remain in use and considered to be in good operating condition. The company is an operating petroleum refinery with process operations including crude desalting, atmospheric crude distillation, and fluid catalytic cracking, etc. Products include gasoline (formerly producing leaded gasoline), LPG, distillate fuels and coke. Wastewater generated at the plant passes through various settling basins, skimmers and treatment processes prior to being discharged into the Mississippi River. The discharge is regulated by a National Pollutant Discharge Elimination System (NPDES) permit issued by the IEPA. Waste streams generated by the refinery processes are DAF float, slop oil emulsions, heat exchanger bundle cleaning sludge, and API separator sludge. These wastes are then processed into various materials and sold by Clark. Another waste

stream formerly generated by Clark was leaded tank bottoms. During the time period of leaded gasoline production, storage tanks were routinely cleaned when empty. The leaded tank bottom sludge was cleaned from the bottom of these tanks and placed in an unlined pit on refinery property to dewater and dry. The pit remains and consistently contains water.

The majority of the sites ground surface consists of soil, weeds, cinders, white gravel, asphalt and concrete. Soil, grass and white gravel comprise the secondary containment berms surrounding the facility's storage tanks. Landscaping at the main office building consists of a small amount of grass with some bushes and trees. The old wastewater treatment lagoons remain in existence and contain water of unknown depth. Currently these lagoons have approximately four feet of freeboard. Berms are constructed of soil covered with grass, with various areas protected by rock rip-rap at the normal pool elevation.

The nearest individual and occupied structure is located off site. The structure, along with a number of others immediately adjacent to the refinery, is a single-family residence located approximately 300 feet west of the refinery's western property boundary. Additional residential areas exist west, north, and southeast of Clark. The Mississippi River is located approximately 800 feet west of the old lagoons and approximately 4000 feet west of the western property boundary of the refinery process area.

Surface water runoff from the refinery is collected in either area drains or open channels and routed to the Guard Basin at the southeast portion of the facility. Skimmers then remove any grease or oil from the water surface. Water in the Guard Basin is used as the refinery's fire protection reservoir. A 15-mile surface water drainage route map identifying surface water migration is provided in Appendix A. Appendix A also provides a 4-mile radius groundwater

migration map identifying areas of potential impact.

The Clark Oil refinery property is entirely fenced with an eight-foot high chain link fence topped with three strands of barbed wire. An electronic main access gate is actuated by a guard 24 hours a day. The Clark Oil refinery property can be accessed only after a visitor contacts an employee from the main office, the visitor signs in, attends a company safety training class (good for one year), and is escorted throughout the facility.

While walking both Clark property locations, air monitoring was conducted by use of a Foxboro Toxic Vapor Analyzer (TVA) meter. Monitoring of the breathing zone and near the soil surface occasionally registered two or three meter units above background readings (1 - 2 meter units) at the refinery and no readings above background at the old wastewater treatment lagoons. No peculiar or extremely unusual site characteristics were noted during the survey. Further inspection of the old wastewater treatment lagoons revealed signs of recreational use on this property, ie; discarded fishing tackle, deposits of beverage containers, cigarettes, etc. Signs of animals were also present on this property. At this time, consideration of the lagoons as a fishery is speculative. The fill area on the southern most lagoon, as mentioned previously, remains active. Refuse consisted mainly of gravel, broken concrete, and soil.

Surface soil on the refinery property consists of silty clay, silty sand and sandy clay. Gravel and or cinders cover this soil in a number of locations on this property. The soil surface surrounding the lagoon property consists of silty loam, silty clay, silty sand and sandy clay. In some locations gravel had been placed on the soil surface. West of the lagoons and extending approximately six hundred feet west toward the Mississippi River is an area of overgrown vegetation, timber and bushes.

The Clark Oil & Refining Company property is located in an area of southwestern central Illinois where surficial terrain has been shaped by various types of glacial action and deposition, and riverine dynamics and morphology. The land surface has been modified by glacial activity into the gently rolling terrain surrounding the Mississippi River flood plain. Modifying this terrain was the transport of glacial outwash and the meandering of the Mississippi River to form Mississippi River flood plain referred to as the American Bottoms. The refinery property is flat and lies at approximately 428 feet above mean sea level (MSL). The topography surrounding the property is also relatively flat and lies at basically the same distance above MSL. The lagoon property is also flat and lies at approximately 415 feet above MSL. Normal pool elevation of the Mississippi River is 398 feet above MSL. Site slope is basically non-perceptible for the majority of the site. Surface drainage follows minor site slopes to area drains, open channels or pools in place Although much of the moisture on site does drain to designated locations a large amount also infiltrates into the sandy soil and into area groundwater. As previously mentioned, all site runoff flows into the Guard Basin.

Industry and commercial properties within close proximity of Clark Oil & Refining are Shell Oil Refinery to the north; Amoco Oil Refinery and above ground storage tank farm (tank farm), east and northeast; Shell Oil tank farm, south-southeast; various commercial businesses in South Roxana, southeast; and various commercial businesses in Hartford, west. Overall land use within the four-mile radius of Clark Oil is predominantly rural. However, within 1 mile of the Clark property land use is approximately seventy-five percent industrial.

1.3 SITE HISTORY

Clark Oil & Refining Company began operations in 1941 as the Wood River Refinery. The facility became part of the Sinclair Oil Corporation in July 1950. Clark purchased the refinery property in September 1960. In September 1983 Clark sold the facility to APEX Corporation and then repurchased it in November 1989. In May 2000, the company changed its name and currently, the facility is known as Premcor.

Review of a number of aerial photographs dating from 1954 to 1990 has revealed a number of areas of potential contamination. The photos show areas of various size which, over the years, have been subjected to leaks, spills, surface disposal etc. Since 1970 and the creation of the EPA, Clark has completed necessary remediation of said spills, leaks, etc. However, according to groundwater monitoring well sample results, free product (leaded gasoline) is floating on the water table beneath Clark and the Village of Hartford. The free product has been attributed to Clark through analytical fingerprinting. It remains unclear as to when and how the product migrated from Clark.

According to the State Historical Library's Incorporation Documents, Clark Oil & Refining Company was incorporated to conduct refining of crude oil into gasoline products and to sell such products. As noted previously, Clark has operated as a refinery from 1941 to the present. The Hartford refinery through a series of improvements and expansions, has reached a crude oil throughput capacity of approximately 70,000 barrels per day. Because the refinery includes a coker unit it therefore has the capability to process a high percentage of lower cost, heavy sour crude oil into higher value products such as gasoline and diesel fuel along other with other petroleum products distributed on a wholesale unbranded basis. In addition to heavy sour

crude the refinery units also process light sweet crude oil. The Clark Oil & Refining Company's Hartford facility produces the following motor fuels; conventional gasoline, reformulated gasoline, #1 diesel and #2 diesel fuel. Each product is monitored throughout the production and blending process by obtaining samples and testing for octane (cetane index for diesel), vapor pressure (cold flow properties for diesel), and distillation. Once a refinery tank is full, the batch is mixed for several hours to ensure homogeneity. Composite samples are then pulled and tested for necessary properties. When the product is determined to be "on-test" for all properties, the tank is certified and released for shipment. Clarks' reformulated gasoline is produced by ethanol blending and does not use MTBE in the production of this fuel.

There is no evidence that Clark used any type of containment system to prevent the migration of contaminants into the environment from wastes placed into pits or on the ground surface. Complaints registered by area residents and businesses have been regarding the presence of gasoline fumes in basements and contaminated groundwater.

1.4 REGULATORY STATUS

Clark Oil & Refining Company has had numerous complaints registered against it, mainly due to gasoline fumes in basements. The facility is not subject to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Atomic Energy Act (AEA), or Uranium Mine Tailings Radiation Control Act (UMTRCA).

2.0 EXPANDED SITE INSPECTION ACTIVITIES

2.1 INTRODUCTION

This section contains information gathered during the preparation of the formal CERCLA Expanded Site Inspection and previous Illinois Environmental Protection Agency's activities involving the Clark Oil & Refining Company site. Specific activities included an internal file search, field reconnaissance inspections, site representative interviews, and a sampling visit of the surrounding area and the facility.

2.2 RECONNAISSANCE ACTIVITIES

On October 26, 2000, personnel of Illinois EPA's Site Assessment Unit conducted a reconnaissance inspection of the Clark Oil & Refining Company property and surrounding area. Upon arrival at the main office, located near the southwest corner of the refinery property, contact was made with the plant manager. Introductions took place followed by a short discussion regarding the purpose of the reconnaissance and that the sampling team would be utilizing the Agency's Geoprobe to obtain soil samples on the property. The plant manager and the author then proceeded to tour the refinery. Activity at the refinery was noted to be normal. Three shifts keep the refinery in operation twenty-four hours a day. Employees were noted to be performing routine plant maintenance, monitoring production processes or working in various production process areas. Modes of employee transportation at the refinery other than walking are bicycle or automobile/truck. Hard Hat, steel toe and shank footwear and fire-retardant jumpsuits are required to be worn when on refinery property within the fence line. All fencing around the refinery is well maintained. As the reconnaissance progressed the author and plant

manager placed wooden stakes at potential sample locations throughout the refinery (and later at the old lagoon property). Due to the use of the Geoprobe, once the locations were marked, plant engineering investigated each specific location to assure no underground utilities or piping was present. If the location was deemed clear it was certified and tagged as an acceptable sample location. When the reconnaissance at the refinery property was completed, the plant manager and the author proceeded to the old lagoon property. No fencing exists around the lagoons. The author did not note any unusual characteristics regarding the lagoons. Potential sample locations were marked and handled in the same manner in which the refinery locations were handled. Other areas investigated during the reconnaissance were the surface water drainage routes leading from the property, residential areas near the site, the proximity of the properties to the Mississippi River, and on-site soils. The information attained during the reconnaissance and additional information gathered on November 1, 2 & 9, 2000 is included in the site description in Section 1.2 of this report.

2.3 REPRESENTATIVE INTERVIEWS

Site representative interviews were conducted on various occasions over the telephone between personnel of the IEPA, and the refinery manager of Clark Oil & Refining Company during October and November 2000 prior to the site inspection. Another short interview with an employee of Clark Oil was conducted on November 1, 2000 just prior to the actual site inspection sampling activities. The interviews were conducted to inform the site representatives of IEPA's intentions, to talk about past, present and future activities and problems, explain the CERCLA site assessment process, and to confirm proposed sampling locations. The plans

involved the collection of 30 soil/sediment samples (which includes a duplicate sample) from on and off site. A number of these samples will be described as shallow, others will be described as deep. Samples were to be collected by utilizing IEPA's Geoprobe, a direct push technology; stainless steel bucket auger or stainless steel trowel. The type of equipment used to collect the samples depended on the various sample locations and location characteristics on and off site. Each sample location was chosen to determine if contamination existed in shallow or deep strata or at a specific area on refinery and lagoon property and whether a contaminant was attributable to Clark. The Geoprobe, in addition to obtaining shallow soil samples, was to be used to collect soil samples at depths of between 20'-30' in order to determine if contaminants were present in native soil beneath the refinery and old lagoon property. The Geoprobe was also used to determine if contaminants were present at or near the water table. After confirming the sample locations for the site representative the sampling team was given the company safety training after which began the site sampling process. The plant manager was also asked whether any mishaps occurring on-site. He indicated that various minor incidents have occurred over the past few years. The IEPA inspection team leader and the refinery manager also discussed the various types of contaminants that were potentially present on-site due to past and current refinery operations. He was informed that chemical constituents may include various heavy metal, PNA, PAH and volatile compounds.

2.4 SAMPLING ACTIVITIES AND RESULTS

On November 1, 2 & 9, 2000, Illinois EPA personnel collected thirty samples from within the Clark Oil property and immediate area surrounding the property. Samples collected

consisted of twenty-eight soil samples from within the property boundaries of Clark, and two soil samples off-property. The two off-property samples (one shallow and deep in the same Geoprobe bore hole) serve as background samples. The on-property samples were collected to help determine the type of contaminants present and concentration of the contaminants. The off-property soil background sample was collected to serve as a baseline for constituents which may be common in area soils. Additional discussions concerning the analytical results of these samples and their impact on the various migration pathways may be found in Section 4.0 of this ESI report (Migration Pathways). Figures 4 & 5 illustrate the locations of each soil sample. Table 9 describes each soil sample with its location, depth, and physical appearance. Tables 1 - 4 provide an overall summary of soil samples collected during this ESI investigation. Tables 5 - 8 (Soil Key Sample Summary Tables) provides a summary of key soil samples depicting contaminants detected at concentrations at least three times background levels.

Groundwater samples were not scheduled to be collected at the time of this investigation. Prior to the sampling event discussions within the IEPA determined that IEPA's Collinsville Field Operations Section staff would conduct groundwater sampling which would take place during quarterly sampling of Clarks monitor well system. Previously conducted site investigations have determined groundwater flow direction to be, generally, in a northeasterly direction.

The twenty-eight soil samples collected from Clark Oil property revealed elevated levels of several volatile constituents, a number of semi-volatile constituents, and several pesticide and inorganic constituents. All soil samples were analyzed for the Target Compound List constituents. Samples X125 (shallow) & X126 (deep) were designated as background soil

samples. Due to similar constituent quantities reported by the analytical laboratories in these two samples all comparative analysis of samples will be compared to background sample X125. All samples except X119 and X128 contain various volatile constituents at levels equal to or greater than three times background levels (Tables 5). None of the constituents exceed USEPA designated Removal Action Level (RAL) benchmarks, however, the level of benzene exceeds the Superfund Chemical Data Matrix (SCDM) benchmark in sample X130. Samples X102, X103, X105 - X108, X110, X112, X114 - X120, X122 - X124, and X128 - X130 contain various semi-volatile constituents at levels equal to or greater than three times background levels (Table 6). None of the constituents exceed RAL's, however, the level of benzo(a)pyrene exceeds the SCDM benchmark in samples X103, X110, X112, X114, X116 - X120, and X124. Samples X101 - X104, X107, X108, X110, X112, X114, X116 - X120, X122, X124, and X129 contain various pesticide/PCB constituents at levels equal to or greater than three times background levels (Table 7). None of the constituents exceed RAL's, however, the level of dieldrin, 4'4-DDD, aroclor-1254 in sample X103; aldrin in sample X112; dieldin in sample X114; heptachlor and dieldrin in sample X118; and aroclor-1254 in sample X124 exceeds the SCDM benchmarks. Samples X102 - X104, X106, X107, X110, X112 - X118, X120, X124, X127, X128, and X130 contain various inorganic constituents at levels equal to or greater than three times background levels (Table 8). None of the constituents exceed RAL's except cadmium in sample X112. The SCDM benchmark for beryllium is exceeded by all samples except samples X101 and X112. The SCDM benchmark for manganese is exceeded in sample X113. All other constituents are below SCDM benchmarks.

There were no sediment samples or groundwater samples collected during this sampling

event. Groundwater samples were, however, collected by IEPA's Collinsville FOS staff on March 2001.

Groundwater sampling consisted of collecting samples from twenty-four monitor well locations on the Clark Oil Refinery portion of the property. All groundwater samples were analyzed for the Target Compound List constituents. Monitor wells are distributed throughout the refinery property. Groundwater elevations were also determined during this sampling event, the resultant groundwater flow direction was found to be in a northeast trend. A complete report of groundwater conditions on Clark property including analytical data will be completed in early November, 2001. Initial information supplied by the Collinsville field office indicates most monitor wells contained free hydrocarbon product floating on groundwater. Groundwater static level during the May sampling event was approximately thirty feet below ground surface. Information on contaminants and contaminant levels were not available at the time of this writing.

For a list of semi-volatile compounds considered to be polynuclear aromatic hydrocarbons (PNA's), please refer to the Target Compound List found in Appendix B.

A complete analytical data package for the Clark Oil & Refining Company site is located in Appendix D, under a separate cover in Volume 2 of the ESI report.

Photos of IEPA's November 2000 sampling event are located in Appendix C of this report.

3.0 SITE SOURCES

3.1 CONTAMINATED SOIL (ON CLARK OIL REFINERY & LAGOON PROPERTY)

During the November 2000 ESI sampling event twenty-eight soil samples were collected from various locations on the Clark Oil & Refining Company property. Analysis of the collected samples indicated various contaminants above background concentrations with some being three or more times above background concentrations (reference Tables 5 - 8). In addition to the 2000 samples, sample analysis from various previous sampling events were utilized to define sources and determine soil contaminant concentrations. Samples utilized for determining the contaminated soil source were collected at various depths within Clark Oil property. According to the HRS definition of a source when referring to contaminated soil, any area where a hazardous substance has been deposited, stored, disposed, or placed, plus those soils that have become contaminated from the migration of a hazardous substance is considered a source. Based on this definition, sample data and measurements from known points of contamination, the source has been calculated to be an area of approximately two hundred acres (8,712,000 square feet).

3.2 SURFACE IMPOUNDMENT (TANK BOTTOM PIT)

The subject surface impoundment is triangular in shape located slightly northeast of the center of the refinery portion of the property. This impoundment is unlined and contains leaded tank bottom sludge from storage tank cleanout. At the time of the November 2000 sampling event the sludge was covered with approximately six inches to one foot of water. The

impoundment was also noted to have approximately two feet of freeboard remaining. During the November 2000 investigation a sample (X114) was collected from the surface of the sludge below six inches of water. Analytical results of the sample indicated the presence of constituents from each, the volatile, semivolatile, pesticide/PCB and inorganic fractions of the TCL. A few of the constituent concentrations are three times above background (reference Tables 5 - 8). This source has been calculated to contain a volume of approximately 34,322 cubic feet. Volume was calculated with the formula 1/2 (Base x Height) x Depth. 1/2 (131' x 131') x 4' = 34,322'.

3.3 SURFACE IMPOUNDMENTS (OLD WASTEWATER TREATMENT LAGOONS)

The subject surface impoundments are rectangular in shape located west of the refinery portion of the property, west of the Corp of Engineers Flood Control Levee on both, the north and south side of Hawthorne Road. The impoundments were once a three-stage lagoon wastewater treatment system for Clark Oil. The impoundments are unlined and contain material which has either been pumped or placed into them by Clark. At the time of the November 2000 sampling event the lagoons contained water, however depth was not determined. The impoundments were also noted to have approximately four to six feet of freeboard remaining. During the November 2000 investigation a samples (X101 - X104 & X127 & X128) were collected from the bermed areas surrounding the lagoons. Analytical results of the samples indicated the presence of constituents from each, the volatile, semivolatile, pesticide/PCB and inorganic fractions of the TCL. A few of the constituent concentrations are three times above background (reference Tables 5 - 8). This source has been calculated to contain a volume of approximately 150 acres.

3.3 PLUME OF CONTAMINATED GROUNDWATER

According to the HRS definition of characterizing a source when referring to a plume of contaminated groundwater resulting from an unknown source(s), the plume of contamination must be identified by sampling and inference, using observed release criteria along with a level of effort similar to an ESI, to possibly identify the original source(s). Sample data from several site investigations and required quarterly sampling of monitor wells by Clark Oil has indicated that the plume extends from beneath the Clark Oil refinery portion of the property, west and northwest to beneath the Village of Hartford. Based on the definition, sample data available, and measurements from known points of contamination the source has been calculated to cover an area of approximately fifty acres (2,178,000 square feet).

4.0 MIGRATION PATHWAYS

4.1 GROUNDWATER

According to the Illinois State Geological Survey and the Illinois State Water Survey the Clark Oil & Refining facility is situated on what is locally known as the American Bottoms otherwise known as the Cahokia Alluvium. The Cahokia consists of approximately forty-five feet of silt, clay, and silty sand, overlying sixty to ninety feet of sand and gravel glacial outwash of the Mackinaw Member of the Henry Formation. The Mackinaw Member is Wisconsinan in age and is glacial outwash in the form of valley-train deposits. Underlying the alluvium and outwash is Pennsylvanian and Mississippian age limestone and dolomite with lesser amounts of sandstone and shale. The Cahokia Alluvium consists of unconsolidated, poorly sorted, fine-grained materials with some local sand and clay lenses. This material becomes coarser with depth. This material was laid down via flood events, eolian activity, bank slumping, and erosion and deposited material from tributary streams. The Mississippi River has frequently and extensively altered this material. The Mackinaw Member consists of materials which are generally medium to coarse sand and gravel and, as does the Cahokia Alluvium, also increases in grain size with depth. Till and/or boulder zones may be encountered ten to fifteen feet above bedrock. The Ste. Genevieve Limestone, underlying the Mackinaw Member, consists of limestone, dolomite, sandstone and shale. Sandstone and sandy limestone are present mainly in thin beds. This formation is approximately eighty feet thick in the area near the Clark facility. Underlying the Ste. Genevieve Limestone is the St. Louis Limestone consisting mainly of fine-grained, cherty limestone but also containing beds of dolomite, crystalline limestone, fossiliferous limestone and evaporates. The St. Louis Limestone is approximately two hundred

feet thick in the area beneath Clark Oil in Hartford.

All of the Formations and associated Members are hydrologically connected in this area. Groundwater movement beneath the Clark Oil facility and surrounding area tends to reflect the river stage of the Mississippi River. Groundwater has been determined to trend toward the east and northeast when prolonged periods of high river stage exists and toward the west and southwest when the river stage is at normal pool or below. During the May 2001 groundwater investigation at the Clark Oil refinery property, groundwater was encountered between eighteen and twenty feet below ground surface (BGS) upon initial measurement of monitor wells prior to bailing and sampling. Monitor wells vary in total depth from twenty-five to sixty feet below ground surface. Land surface elevation throughout the refinery portion of the property is approximately 428 feet above mean sea level (MSL). Groundwater in the shallow alluvial and sand and gravel outwash aquifer may ultimately discharge into nearby streams and wells with some movement into the deeper bedrock formations. Flow direction of groundwater in local bedrock follows eroded bedrock surfaces at depth, which dip toward the west and along old eroded valleys as indicated by the Illinois State Water Survey Bulletin 60-4.

Records obtained from the Illinois State Water Survey (ISWS) indicate that there are numerous industrial/commercial (I/C) wells pumping groundwater from the alluvial/glacial outwash formation and the limestone/dolomite formation throughout the Hartford, Roxana, and Wood River area, including wells at Clark Oil. The industrial/commercial wells are drawing water from between twenty and one hundred seventy-one feet below ground surface. The shallow I/C wells are older wells drilled during the early 1900's, some of which are no longer in use. Drinking water in the area is supplied by public and private wells and through the

distribution system of the Illinois American Water Company (IAWC). Public and private wells utilize the shallow sand and gravel alluvial and glacial outwash deposits of the American Bottoms for drinking water supplies. IAWC utilizes surface water from the Mississippi River as a source for drinking water. IAWC operates three intakes near the Clark Oil & Refining facility. One upstream at Alton, Ill. (river mile 202); and two downstream, one on Chouteau Island (river mile191.6) and another at East St. Louis (river mile 180.8). The Illinois State Water Survey (ISWS) records indicate that Hartford, Roxana, South Roxana, East Alton, Bethalto, Edwardsville, and Wood River are utilizing groundwater as a source of drinking water. Hartford uses two active and has two standby wells in serving 1680 residents, Roxana and South Roxana use three wells in serving 3560 residents, East Alton uses six wells in serving 7100 residents, Bethalto uses five wells in serving 9500 residents, Edwardsville uses nine wells, located in the community of Poag, in the American Bottoms in serving 20,250 residents and Southern Illinois University's Edwardsville Campus, and Wood River uses four wells in serving 11,900 residents. All of the wells are between seventy-nine and one hundred fifteen feet deep and extracting water from the sand and gravel aquifer. According to Illinois State Water Survey records, there are approximately 161 private wells (serving 423 people) within four miles of the Clark Oil & Refining facility using the alluvial/glacial outwash aquifer. Total population using the sand and gravel aquifer is 54,151. Within a four-mile radius of the Clark facility there are no private drinking water wells penetrating the shallow Pennsylvanian and Mississippian limestone and dolomite aquifer. Although this aquifer is hydraulically connected to the alluvial/glacial outwash sand and gravel aquifer, there are no known individuals within four-miles of the Clark facility directly utilizing the limestone/dolomite aquifer other than for I/C purposes. The closest

private domestic well uses the sand and gravel aquifer of concern and is, according to ISWS well logs, 3500 feet north of the facility with a total depth of ninety-seven feet. Hartford's Well #4 is the closest public well to Clark, being 1600 feet west of the facility's refinery operations. This well, and well #3, has been documented to contain volatile organic and semi-volatile contaminants. In addition to the presence of contamination in the public wells, there have been documented incidents of petroleum odor in basements of a number of residences in the north portion of Hartford. Evacuation of these homes was required while the basements were ventilated. A number of recovery wells have been placed at various locations throughout Hartford to recover petroleum constituents from the surface of area groundwater. Information obtained monthly from recording devices attached to the extraction wells indicate volumes of petroleum constituents in the thousands of gallons recovered from a number of these wells.

A listing of the number of public and private wells and approximate number of users in each distance category are presented below.

Number of wells and users within 4-miles of Clark Oil & Refining Company

Distance	Groundwater Wells	Private Well Population	Public Well Population
0 - 1/4 mile	0	0	1680 (Hartford)
1/4 - 1/2 mile	0	0	0
½ - 1 mile	2	5	0
1 - 2 miles	18	47	15,460 (Roxana & S. Roxana)
2 - 3 miles	57	150	9,500 (Bethalto)
3 - 4 miles	84	221	27,350 (E. Alton) (Edwardsville)

The private well population was calculated using USGS topographic maps for the area surrounding the facility and 2.63 people per household in Madison County, as established by the U.S. Census Bureau (1990). Public well information obtained from the Illinois State Water Survey.

4.2 SURFACE WATER

As mentioned in Section 1.2, surface water runoff from the Clark Oil & Refining is collected in either area drains or open channels and routed to the Guard Basin at the southeast portion of the refinery facility. Also as mentioned in Section 1.2, skimmers remove any grease or oil from the water surface entering the Guard Basin. Water in the Guard Basin is used as the refinery's fire protection reservoir. Any drainage not collected by the area drains or channel tends to pool and evaporate. There is a limited amount of drainage, which flows off of the property and into roadside ditches east and south of the facility. Drainage patterns viewed on topographic maps and aerial photographs have been visually verified. Drainage that collects in the roadside

ditches flows south and east via overland flow toward the intersection of State Route 111 and Hawthorne St. Drainage then flows south along the west side of Route 111 for two miles at which point it flows into the Cahokia Diversion Channel. The Diversion Channel then flows two and one half miles to the Mississippi River. The point at which the small ditches carrying surface runoff enters the Cahokia Diversion Channel is identified as the probable point of entry (PPE) to surface water for the drainage pattern from the site. The PPE is located four and one half miles from the southeast corner of the site. The 15-mile in-water segment of the surface water pathway begins at the confluence of the Route 111 roadside ditch and the Cahokia Diversion Channel and terminates at Mississippi River mile 182.5. The Illinois American Water Company (IAWC) utilizes surface water from the Mississippi River as a source of drinking water for communities in the Alton, Granite City, Cahokia area. IAWC operates three intakes near the Clark Oil & Refining facility . One upstream at Alton, Ill. (river mile 202); and two downstream, one on Chouteau Island (river mile191.6) and another at East St. Louis (river mile 180.8). Along the 15 - mile in-water segment there is one surface water intake. This intake is located on Chouteau Island. There are no other known intakes along the 15-mile in-water segment of surface water route. The Mississippi River in-water segment, from river mile 195 to river mile 182.5, has been identified as a fishery. Wetlands exist; approximately four thousand feet south of Clark, west of Route 111; along the Cahokia Diversion Channel, and along the Mississippi River. The wetland area south of Clark is described as a palustrian, emergent seasonally flooded environment. The open channel of the Diversion Channel is described as a riverine, lower perennial, unconsolidated bottom, permanently flooded, excavated environment. Along and outside of both banks of the channel is described as palustrian, emergent/scrub-shrub/forested,

persistent or broad-leafed deciduous, temporarily or seasonally flooded environments. Along and beyond the banks of the Mississippi River are environments similar to those described for the Cahokia Diversion Channel.

No surface water or sediment samples were collected during the November 1, 2 & 9, 2000 Expanded Site Investigation of Clark Oil & Refining Company. The focus of this ESI centered on evaluating soil (shallow elevations and at depth) for contamination and its proximity to groundwater.

4.3 SOIL EXPOSURE PATHWAY

Soil sample analytical results indicate observed exposure to the soil exposure pathway by contaminants that are attributable to the sites' former activities and products and are within the top two feet of soil or cover material. Current analytical data compared with previously collected data indicate that qualitatively the site contamination remains the same. Compounds found three times background concentrations or above detection limits from this sampling effort are considered valid as a confirmed release to the soil exposure pathway (reference Tables 5 - 8). Contributing factors to this contamination have been discussed previously.

Activity on site consists of persons working in and around structures and plant process equipment. Activities on site (daily activity, demolition, construction, etc.) result in various degrees of surface disturbance. A number of spills and leaks etc. have occurred during the existence of the company. Remediation efforts were indicated to have been initiated with all mishaps. Clark Oil has always indicated that cleanup efforts were satisfactorily completed according to appropriate regulations. Clark Oil & Refining employs approximately 150 people.

These workers have the potential to contact contaminated waste, soil and/or breathe contaminated air. The same could be said about those individuals (contractors) who have been or are now involved with previous or current site activities, such as demolition or construction. Contact potential may continue depending on future site activity. Analysis of samples collected during the November 2000 ESI indicate contaminants exist on Clark property from surface grade to a depth, below current grade, of up to 11 feet. Within a 4-mile radius of the site the population is calculated to be approximately 27,960 persons. The nearest individual is located in a residential dwelling approximately 300 feet west of the southwest corner of the Clark refinery property. Three persons reside in this dwelling.

There are no schools or day care facilities on-site or within 200 feet of contaminated areas. Nearby population within one mile of Clark has been calculated to be 4,646 and is presented below.

Workers and Near-by population within one mile of the site

Distance	Population
On-site	150
0 - 1/4 mile	919
1/4 - ½ mile	1,269
½ - 1 mile	2,308

The population was calculated using USGS topographic maps for the area surrounding the facility and 2.63 people per household in Madison County, as established by the U.S. Census Bureau (1990)

4.4 AIR ROUTE

During the November 1, 2, & 9, 2000 Expanded Site Investigation there were no formal air samples collected. A Foxboro TVA was utilized to screen ambient air around the site, air in the breathing zone at each sample point, and the sample as it was taken. This unit was also used during operation of the Geoprobe to screen the breathing zone and sample cores as the core sleeves were opened prior to sampling.

Agency records indicate that Clark Oil & Refining has had a number of air releases and permit violations over the years of operation. With each incident mitigative measures were and have been implemented to correct problems and attempt to avoid future incidents. Air Permits issued to Clark have applied to their various process equipment and storage tanks.

Within a 4-mile radius of the site the population is calculated to be approximately 27,960 persons. The nearest individual (Clark Oil & Refining employees) and regularly occupied building (the buildings on Clark Oil property) is located on-site, situated at various locations on the property. The approximate number of individuals potentially exposed to air-borne particulates is listed below. The potential for wind blown particulates to carry contaminants off-site is possible since these contaminants have been found in the top six inches of soil on-site. Sensitive environments within four miles of Clark Oil property consist of wetlands, which have been described previously in this report.

Individuals potentially exposed to air-borne contaminants

Distance	Population
On-site	150
0 - 1/4 mile	919
1/4 - 1/2 mile	1269
1/2 - 1 mile	2308
1 - 2 miles	7046
2 - 3 miles	8758
3 - 4 miles	7510

The population was calculated using USGS topographic maps for the area surrounding the facility and 2.63 people per household in Madison County, as established by the U.S. Census Bureau (1990)

5.0 FIGURES AND TABLES

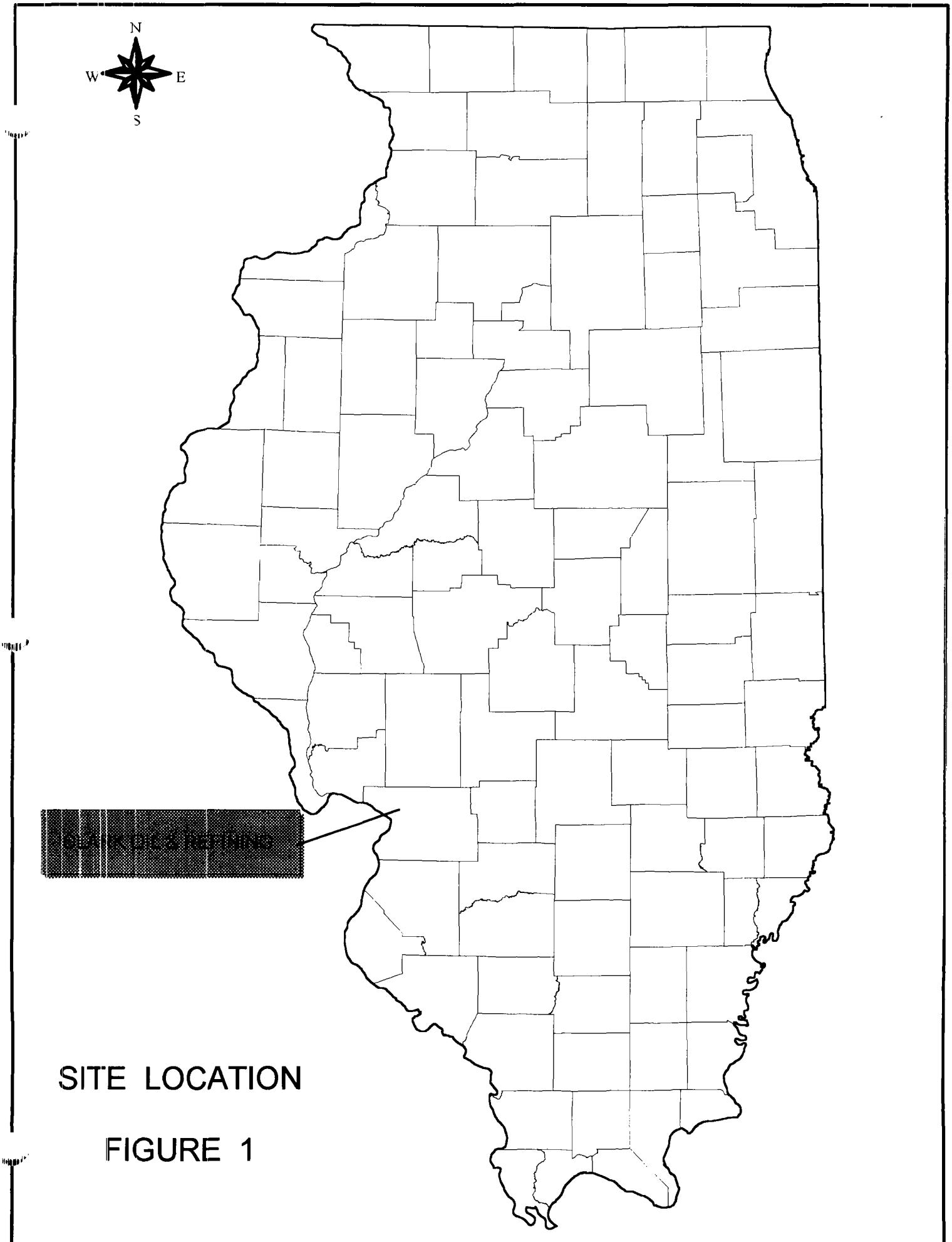
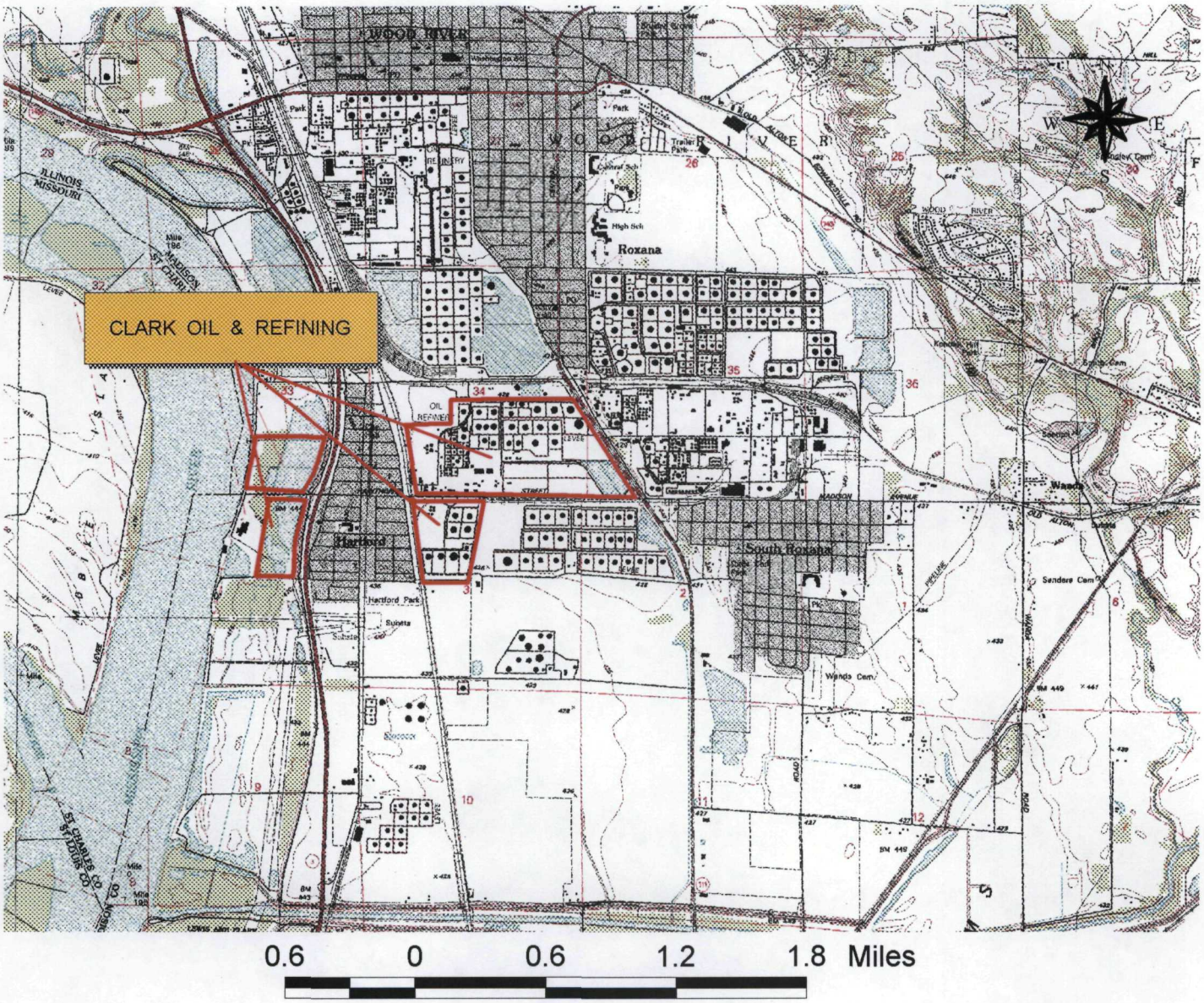


FIGURE 1

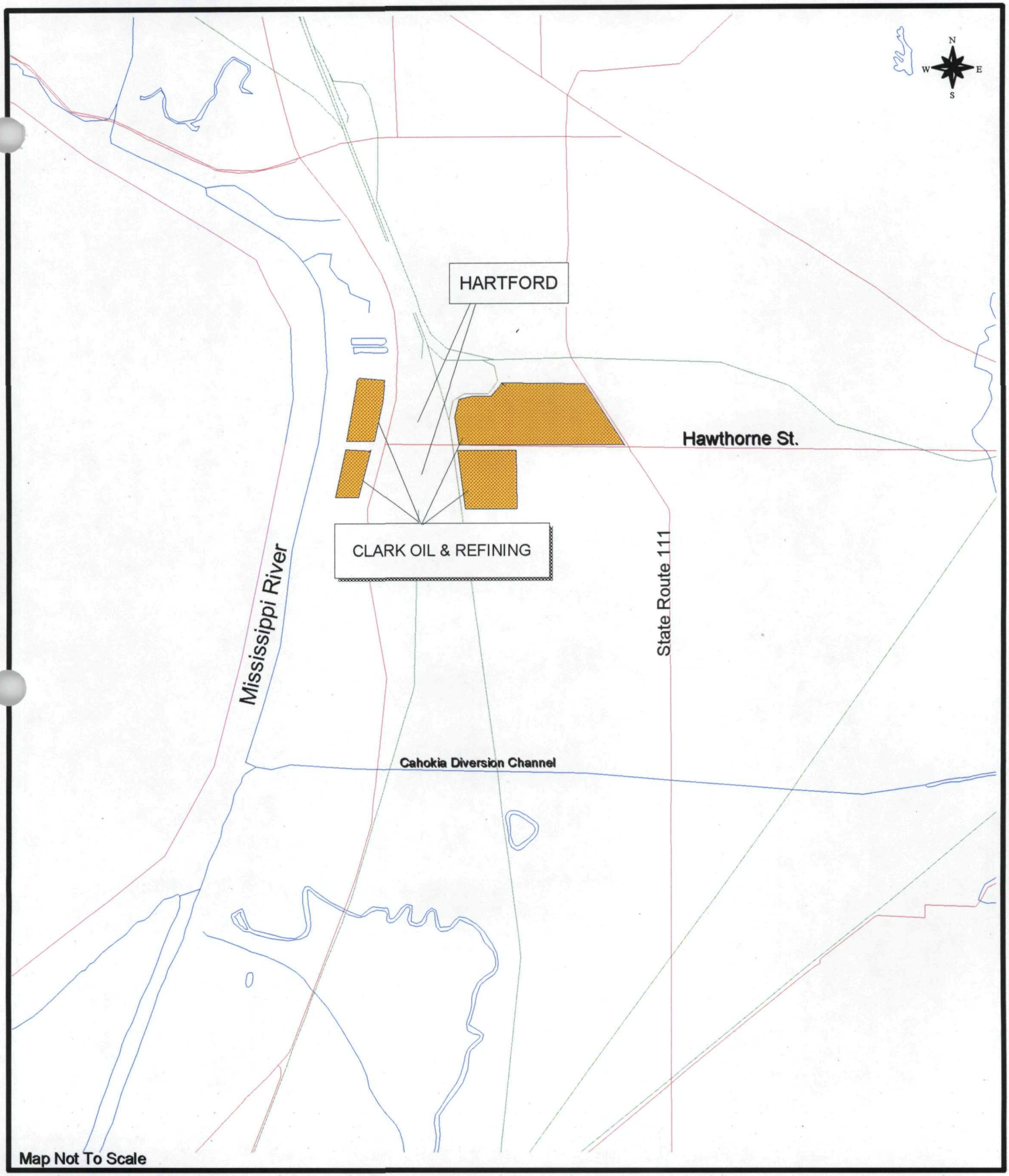
SITE LOCATION

FIGURE 1



TOPOGRAPHIC MAP

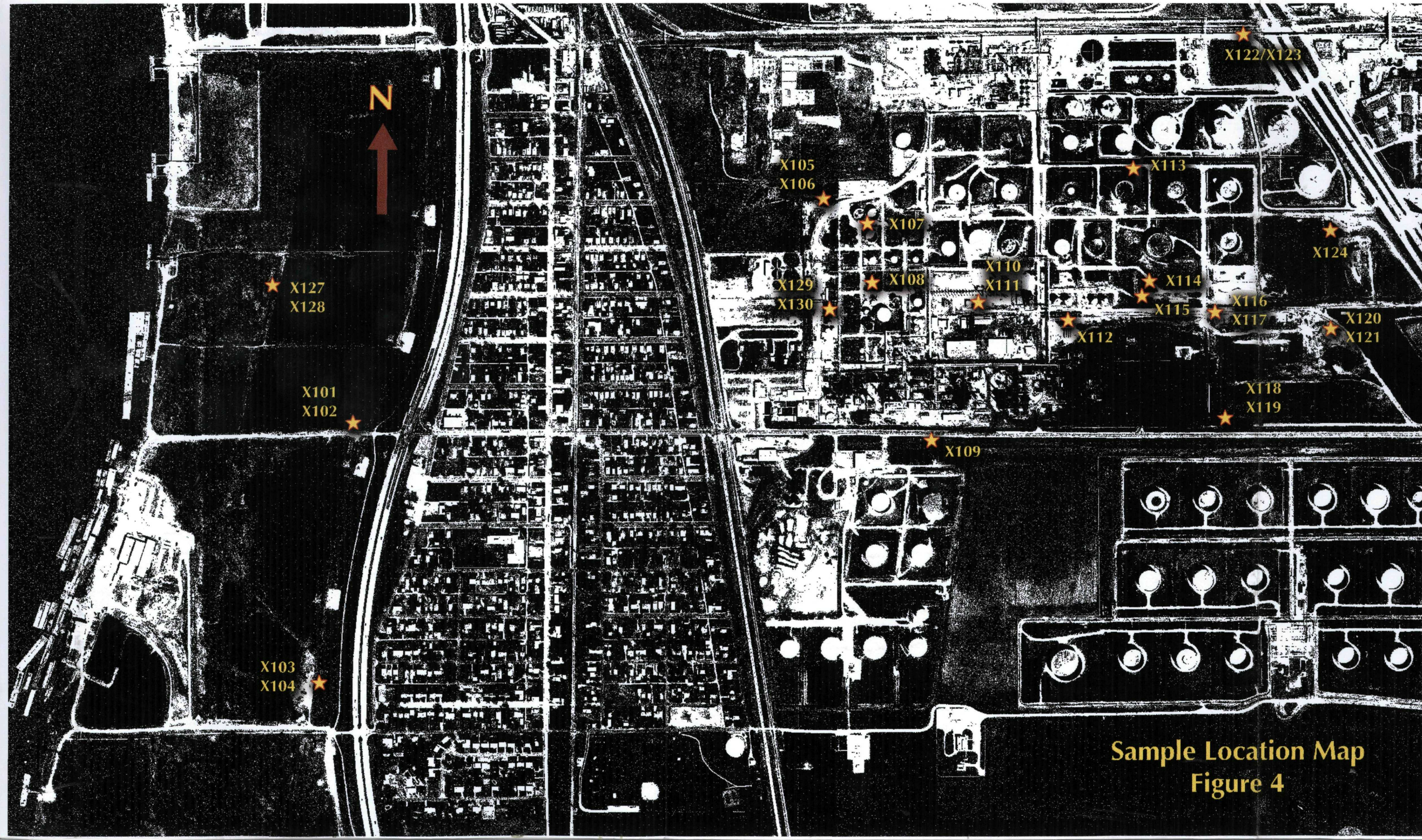
Figure 2



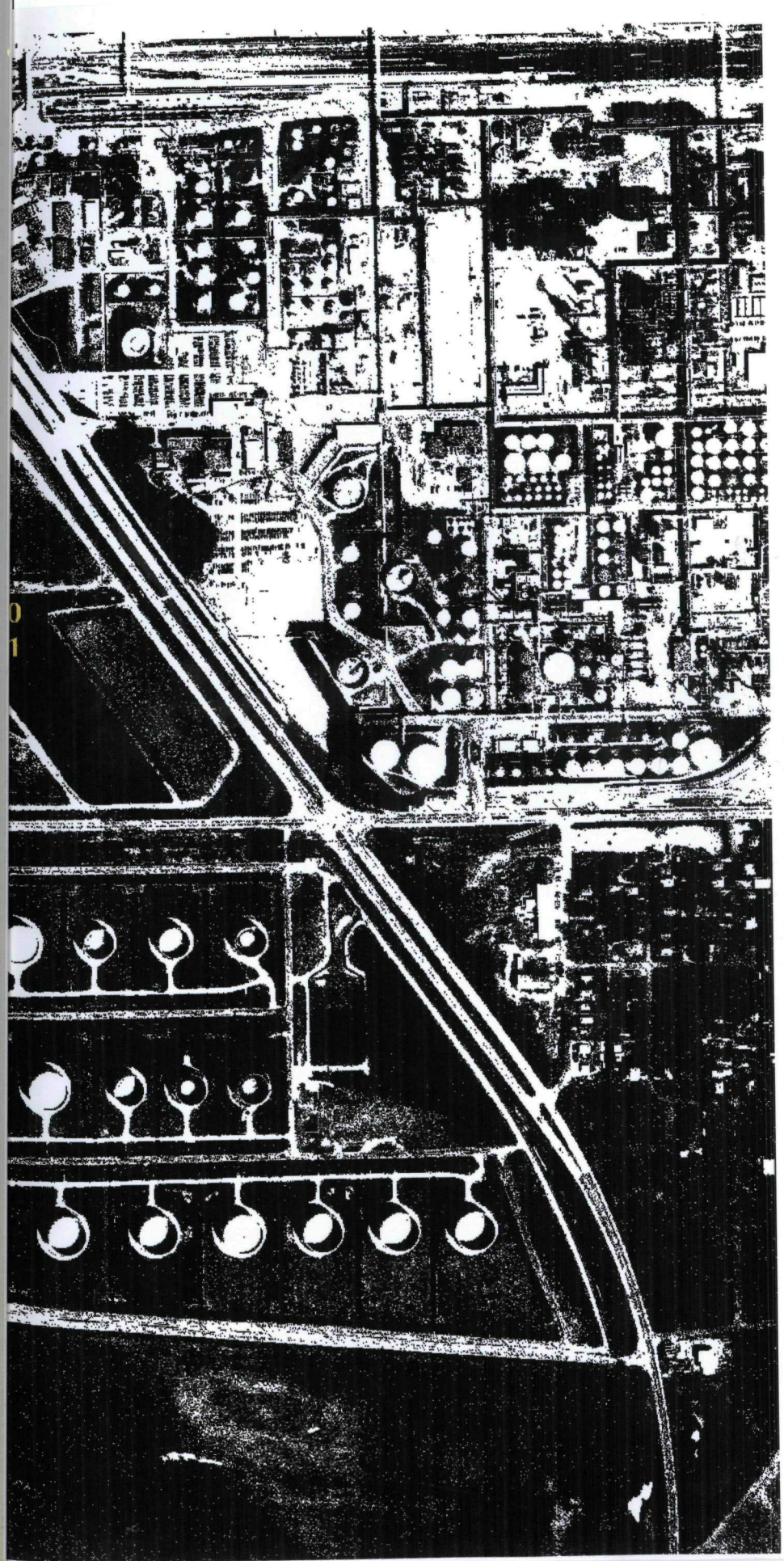
CLARK OIL & REFINING

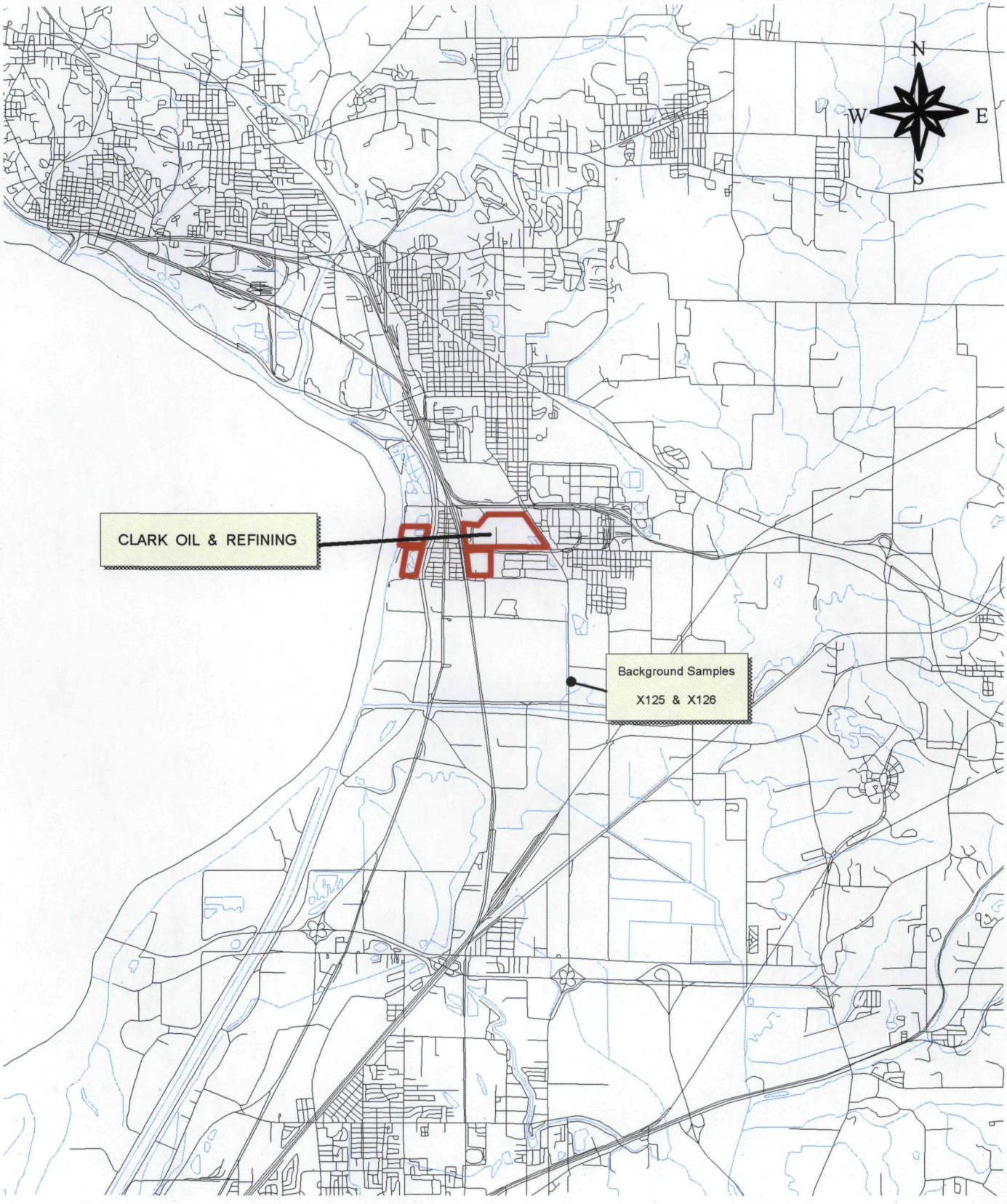
Local Features Map

Figure 3



Sample Location Map
Figure 4





OFF - SITE
SAMPLE LOCATION MAP

Figure 5

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 1

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab.
Reviewer :
Date :

SDG EE01B
CLARK OIL
LIBRTY

Sample Number :	EE01B		EE01C		EE01D		EE01E		EE01F		EE01G		EE01H		EE01J		EE01K		EE01L	
Sampling Location :	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/02/2000		11/02/2000	
Time Sampled :	11:30		11:30		12:50		13:10		15:00		15:20		16:00		16:45		08:15		09:25	
%Moisture :	0		29		16		22		8		21		18		25		20		20	
pH :																				
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1 0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	19	U	14	UJ	11	U	11	UJ	10	UJ	1100	UJ	1100	UJ	22	U	12	U	11	U
Chloromethane	19	U	14	U	11	U	11	U	10	U	1100	UJ	1100	UJ	22	U	12	U	11	U
Vinyl Chloride	19	U	14	U	11	U	11	U	10	U	1100	UJ	1100	UJ	22	U	12	U	11	U
Bromomethane	19	U	14	U	11	U	11	U	10	U	1100	UJ	160	J	22	U	12	U	11	U
Chloroethane	19	U	14	U	11	U	11	U	10	U	1100	UJ	1100	UJ	22	U	12	U	11	U
Trichlorofluoromethane	19	U	14	UJ	11	U	11	UJ	1	J	1100	UJ	1100	UJ	22	U	12	U	11	U
1,1-Dichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,1,2-Trichloro-1,2,2-trifluoroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Acetone	110	J	36	UJ	50	J	11	U	200	J	1100	U	1100	U	200	J	11	J	19	UJ
Carbon Disulfide	19	U	2	J	11	U	11	UJ	2	J	1100	U	1100	U	22	U	12	U	11	U
Methyl Acetate	8	J	14	UJ	11	UJ	11	UJ	10	UJ	1100	U	1100	U	22	UJ	6	J	11	UJ
Methylene Chloride	19	U	14	U	11	U	11	U	16	U	1100	U	140	J	22	U	16		11	U
trans-1,2-Dichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Methyl tert-Butyl Ether	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,1-Dichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
cis-1,2-Dichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
2-Butanone	23	J	6	J	9	J	11	UJ	10	UJ	1100	U	1100	U	22	UJ	12	UJ	11	U
Chloroform	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	1	J
1,1,1-Trichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Cyclohexane	4	J	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	1	J
Carbon Tetrachloride	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Benzene	19	U	14	U	11	U	2	J	10	U	200	J	1400	J	6	J	12	U	2	J
1,2-Dichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Trichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Methylcyclohexane	4	J	14	U	11	U	4	J	10	U	9100		2800	J	180		12	U	3	J
1,2-Dichloropropane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Bromodichloromethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
cis-1,3-Dichloropropene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
4-Methyl-2-pentanone	12	J	14	UJ	11	U	11	UJ	10	UJ	1100	U	1100	U	22	U	12	U	11	U
Toluene	19	U	4	J	2	J	3	J	9	J	1100	U	810	J	22	U	2	J	3	J
trans-1,3-Dichloropropene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,1,2-Trichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Tetrachloroethene	19	U	1	J	11	U	2	J	2	J	1100	U	1100	U	22	U	2	J	11	U
2-Hexanone	19	U	14	UJ	11	U	11	UJ	10	UJ	1100	U	1100	U	22	U	12	U	11	U
Dibromochloromethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2-Dibromoethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Chlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Ethylbenzene	19	U	14	U	11	U	11	U	5	J	1400		5300	J	22	U	12	U	11	U
Xylenes (total)	19	U	42		11	U	11	U	10		180	J	35000	J	220		12	U	5	J
Styrene	19	U	14	U	11	U	11	U	10	U	1100	U	150	J	22	U	12	U	11	U
Bromoform	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Isopropylbenzene	19	U	14	U	11	U	11	U	10		420	J	400	J	13	J	12	U	11	U
1,1,2,2-Tetrachloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,3-Dichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,4-Dichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2-Dichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2-Dibromo-3-chloropropane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2,4-Trichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 1

Analytical Results (Qualified Data)

Case # 28678
Site : SDG : EE01K
Lab : CLARK OIL
Reviewer : LIBRTY
Date :

Sample Number :	EE01M		EE01N		EE01P		EE01Q		EE01R		EE01S		EE01T		EE01W		EE01X		EE01Y	
Sampling Location :	X111		X112		X113		X114		X115		X116		X117		X118		X119		X120	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000	
Time Sampled :	09:35		10:05		11:05		12:00		12:15		13:25		13:25		14:20		14:35		15:40	
%Moisture :	16		29		29		4		26		18		19		18		22		4	
pH :																				
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	12	U	70	U	14	U	8000	UJ	13	U	14	U	14	U	20	U	64	U	9	U
Chloromethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Vinyl Chloride	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Bromomethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Chloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Trichlorofluoromethane	12	U	70	U	14	U	8000	UJ	13	U	14	U	14	U	20	U	64	U	9	U
1,1-Dichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1,2-Trichloro-1,2,2-trifluoroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Acetone	43	J	70	UJ	23	J	8000	UJ	34	UJ	49	J	52	J	20	UJ	210	J	130	J
Carbon Disulfide	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Methyl Acetate	12	UJ	70	UJ	14	UJ	8000	U	13	UJ	14	UJ	14	UJ	20	UJ	64	UJ	9	UJ
Methylene Chloride	17		70	U	22		8000	U	14	U	14	U	14	U	20	U	64	U	9	U
trans-1,2-Dichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Methyl tert-Butyl Ether	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1-Dichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
cis-1,2-Dichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
2-Butanone	23	J	70	U	5	J	8000	UJ	6	J	9	J	14	U	20	U	33	J	22	
Chloroform	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1,1-Trichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Cyclohexane	12	U	200		14	U	58000		1	J	14	U	14	U	20	U	64	U	9	U
Carbon Tetrachloride	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Benzene	12	U	70	U	14	U	7100	J	3	J	14	U	14	U	20	U	64	U	9	U
1,2-Dichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Trichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Methylcyclohexane	1	J	710		14	U	130000		13	U	14	U	14	U	20	U	64	U	1	J
1,2-Dichloropropane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Bromodichloromethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
cis-1,3-Dichloropropene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
4-Methyl-2-pentanone	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Toluene	2	J	16	J	3	J	1800	J	2	J	2	J	14	U	20	U	64	U	2	J
trans-1,3-Dichloropropene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1,2-Trichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Tetrachloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	1	J	3	J	64	U	9	U
2-Hexanone	12	U	70	UJ	14	U	8000	UJ	13	U	14	U	14	UJ	20	UJ	64	UJ	9	UJ
Dibromochloromethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2-Dibromoethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Chlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Ethylbenzene	12	U	30	J	14	U	10000		13	U	14	U	14	U	20	U	64	U	9	U
Xylenes (total)	12	U	1000		14	U	34000		2	J	14	U	14	U	20	U	64	U	4	J
Styrene	12	U	20	J	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Bromoform	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Isopropylbenzene	12	U	39	J	14	U	2900	J	13	U	14	U	14	U	20	U	64	U	9	U
1,1,2,2-Tetrachloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,3-Dichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,4-Dichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2-Dichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2-Dibromo-3-chloropropane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2,4-Trichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 1

Analytical Results (Qualified Data) — Page 3

Case #: 28678 — SDG : EE01K
Site : CLARK OIL
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	EE01Z		EE020		EE021		EE022		EE025		EE026		EE027		EE028		EE029		EE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Moisture :	27		25		6		15		22		21		24		39		26		26	
pH :																				
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Chloromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Vinyl Chloride	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Bromomethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Chloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Trichlorofluoromethane	12	U	13	U	12	U	10	U	1	J	14	UJ	11	UJ	16	UJ	2	J	16000	U
1,1-Dichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1,2-Trichloro-1,2,2-trifluoroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Acetone	23	J	17	J	21	J	24	J	49	J	14	UJ	160	J	29	UJ	49	J	24000	
Carbon Disulfide	12	U	13	U	12	U	10	U	11	UJ	14	UJ	2	J	16	UJ	4	J	16000	U
Methyl Acetate	12	UJ	13	UJ	12	UJ	10	UJ	11	UJ	14	UJ	11	UJ	16	UJ	12	UJ	16000	U
Methylene Chloride	15		13	U	16		10	U	11	U	24	U	18	U	17	U	17	U	4100	J
trans-1,2-Dichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Methyl tert-Butyl Ether	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1-Dichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
cis-1,2-Dichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
2-Butanone	12	UJ	13	UJ	4	J	10	UJ	4	J	14	UJ	23	J	16	UJ	12	UJ	16000	U
Chloroform	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1,1-Trichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Cyclohexane	12	U	13	U	12	U	2	J	11	U	14	U	11	U	16	U	12	U	16000	U
Carbon Tetrachloride	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Benzene	12	U	13	U	12	U	1	J	11	U	14	U	11	U	16	U	53		34000	J
1,2-Dichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Trichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Methylcyclohexane	12	U	13	U	12	U	3	J	11	U	14	U	11	U	16	U	120		89000	
1,2-Dichloropropane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Bromodichloromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
cis-1,3-Dichloropropene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
4-Methyl-2-pentanone	12	U	13	U	12	U	10	U	11	UJ	14	UJ	11	UJ	16	UJ	12	UJ	16000	U
Toluene	1	J	13	U	2	J	4	J	11	U	2	J	3	J	16	U	4	J	16000	U
trans-1,3-Dichloropropene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1,2-Trichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Tetrachloroethene	2	J	2	J	12	U	1	J	11	U	14	U	11	U	16	U	12	U	16000	U
2-Hexanone	12	U	13	U	12	U	10	U	11	UJ	14	UJ	11	UJ	16	UJ	12	UJ	16000	U
Dibromochloromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,2-Dibromoethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Chlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Ethylbenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	3	J	110000	
Xylenes (total)	12	U	13	U	12	U	10	U	11	U	4	J	11	U	16	U	8	J	160000	
Styrene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Bromoform	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Isopropylbenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	18		17000	
1,1,2,2-Tetrachloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,3-Dichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,4-Dichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,2-Dichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,2-Dibromo-3-chloropropane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	UJ
1,2,4-Trichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 2

Analytical Results (Qualified Data)

Case # 28678
Site SDG EE01B
Lab CLARK OIL
Reviewer LIBRTY
Date .

Sample Number .	EE01B	EE01C	EE01D	EE01E	EE01F	EE01G	EE01H	EE01J	EE01K	EE01L
Sampling Location	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Date Sampled	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/02/2000	11/02/2000
Time Sampled	11:30	11 30	12 50	13.10	15:00	15:20	16:00	16:45	08:15	09:25
%Moisture	0	29	16	21	8	21	18	25	20	20
pH	0 0	7 7	7.7	8 0	6.6	7.9	7.7	8.4	5.8	8.5
Dilution Factor	1.0	1 0	1 0	1.0	1 0	1.0	2.0	1.0	1.0	1.0

Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	*9000*	*U*	*460*	*U*	*390*	*U*	*420*	*U*	*360*	*U*	*420*	*U*	*800*	*U*	*440*	*U*	*410*	*U*	*410*	*U*
Phenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
bis-(2-Chloroethyl) ether	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Chlorophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Methylphenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,2'-oxybis(1-Chloropropane)	9000	UJ	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Acetophenone	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
4-Methylphenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
N-Nitroso-di-n-propylamine	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Hexachloroethane	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Nitrobenzene	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
Isophorone	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Nitrophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,4-Dimethylphenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
bis(2-Chloroethoxy)methane	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,4-Dichlorophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Naphthalene	9000	U	460	U	390	U	420	U	250	J	150	J	2500		440	U	410	U	410	U
4-Chloroaniline	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Hexachlorobutadiene	9000	UJ	460	UJ	390	UJ	420	UJ	360	UJ	420	UJ	800	UJ	440	UJ	410	U	410	U
Caprolactam	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Chloro-3-methylphenol	9000	U	460	UJ	390	UJ	420	UJ	360	UJ	420	UJ	800	U	440	UJ	410	U	410	U
Methylnaphthalene	9000	U	460	U	110	J	420	U	890		1100		2000		440	U	410	U	73	J
Hexachlorocyclopentadiene	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
2,4,6-Trichlorophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,4,5-Trichlorophenol	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
1,1'-Biphenyl	9000	U	460	U	390	U	420	U	360	U	420	U	110	J	440	U	410	U	410	U
2-Chloronaphthalene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Nitroaniline	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
Dimethylphthalate	*9000*	*U*	*460*	*U*	*390*	*U*	*420*	*U*	*360*	*U*	*420*	*U*	*800*	*U*	*440*	*U*	*410*	*U*	*410*	*U*
2,6-Dinitrotoluene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Acenaphthylene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
3-Nitroaniline	23000	UJ	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
Acenaphthene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	50	J	410	U	200	J
2,4-Dinitrophenol	23000	U	1200	UJ	990	UJ	1100	UJ	900	UJ	1100	UJ	2000	U	1100	UJ	1000	U	1000	U
4-Nitrophenol	23000	UJ	1200	UJ	990	UJ	1100	UJ	900	UJ	1100	UJ	2000	UJ	1100	UJ	1000	U	1000	U
Dibenzofuran	9000	U	460	U	42	J	420	U	360	U	420	U	800	U	47	J	410	U	410	U
2,4-Dinitrotoluene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Diethylphthalate	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Fluorene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	66	J	410	U	100	J
4-Chlorophenyl-phenyl ether	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
4-Nitroaniline	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	UJ
4,6-Dinitro-2-methylphenol	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
N-Nitrosodiphenylamine	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
4-Bromophenyl-phenylether	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Hexachlorobenzene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Atrazine	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Pentachlorophenol	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
Phenanthrene	9000	U	460	U	250	J	420	U	360	U	420	U	180	J	69	J	410	U	280	J
Anthracene	9000	U	460	U	50	J	420	U	360	U	420	U	800	U	440	U	410	U	200	J
Carbazole	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	UJ
Di-n-butylphthalate	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Fluoranthene	9000	U	460	UJ	260	J	420	UJ	360	UJ	420	UJ	800	U	440	UJ	410	U	410	U
Pyrene	9000	U	200	J	350	J	420	U	360	U	420	U	370	J	46	J	410	U	2000	
Butylbenzylphthalate	9000	UJ	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
3,3'-Dichlorobenzidine	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
Benzo(a)anthracene	9000	U	460	U	130	J	420	U	360	U	420	U	800	U	440	U	410	U	410	J
Chrysene	9000	U	96	J	160	J	420	U	360	U	420	U	120	J	440	U	410	U	920	
bis(2-Ethylhexyl)phthalate	9000	U	220	J	52	J	420	U	850		600		800	U	460		410	U	3500	
Di-n-octylphthalate	9000	U	1000		390	U	120	J	360	U	420	U	800	U	440	U	410	U	410	U
Benzo(b)fluoranthene	9000	U	460	U	240	J	420	U	360	U	420	U	800	U	440	U	410	U	180	J
Benzo(k)fluoranthene	9000	U	460	U	190	J	420	U	360	U	420	U	800	UJ	440	U	410	U	160	J
Benzo(a)pyrene	9000	U	460	U	130	J	420	U	360	U	420	U	800	U	440	U	410	U	330	J
Indeno(1,2,3-cd)pyrene	9000	U	460	U	91	J	420	U	360	U	420	U	800	U	440	U	410	U	55	J
Dibenzo(a,h)anthracene	9000	U	460	U	45	J	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Benzo(g,h,i)perylene	9000	U	460	U	100	J	420	U	360	U	420	U	800	U	440	U	410	U	170	J

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 2

Analytical Results (Qualified Data)																														
																														Page 2
Case #. 28678	SDG EE01K																													
Site	CLARK OIL																													
Lab	LIBRTY																													
Reviewer																														
Date																														

Sample Number	EE01M		EE01N		EE01P		EE01Q		EE01R		EE01S		EE01T		EE01W		EE01X		EE01Y	
Sampling Location	X111		X112		X113		X114		X115		X116		X117		X118		X119		X120	
Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000	
Time Sampled	09:35		10:05		11:05		12:00		12:15		13.25		13:25		14:20		14:35		15:40	
%Moisture	16		29		29		4		26		18		19		18		22		4	
pH	7 9		7 9		7.6		7.4		7.1		7.6		6.9		8.0		8.4		8.3	
Dilution Factor	1.0		1 0		1 0		1.0		1.0		1.0		2.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Phenol	390	U	80000	J	460	U	31000	U	450	U	2000		450	J	130000		420	U	84	J
bis-(2-Chloroethyl) ether	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Chlorophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Methylphenol	390	U	2300	J	460	U	31000	U	450	U	800		260	J	4100	J	420	U	52	J
2,2'-oxybis(1-Chloropropane)	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Acetophenone	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
4-Methylphenol	390	U	30000		460	U	31000	U	450	U	1600		460	J	51000		46	J	120	J
N-Nitroso-di-n-propylamine	390	U	14000	UJ	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Hexachloroethane	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Nitrobenzene	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
Isophorone	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Nitrophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,4-Dimethylphenol	390	U	2900	J	460	U	31000	U	450	U	380	J	130	J	12000	U	420	U	340	U
bis(2-Chloroethoxy)methane	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,4-Dichlorophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Naphthalene	390	U	21000		460	U	31000	U	450	U	2200		960		19000		420	U	450	
4-Chloroaniline	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Hexachlorobutadiene	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
Caprolactam	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Chloro-3-methylphenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Methylnaphthalene	390	U	94000		460	U	7000	J	50	J	10000		2800		100000		89	J	1900	
Hexachlorocyclopentadiene	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	UJ	12000	U	420	U	340	U
2,4,6-Trichlorophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,4,5-Trichlorophenol	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
1,1'-Biphenyl	390	U	5500	J	460	U	31000	U	450	U	200	J	110	J	5100	J	420	U	340	U
2-Chloronaphthalene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Nitroaniline	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Dimethylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,6-Dinitrotoluene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Acenaphthylene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
3-Nitroaniline	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Acenaphthene	390	U	6500	J	460	U	31000	U	450	U	140	J	810	U	10000	J	420	U	120	J
2,4-Dinitrophenol	990	U	35000	U	1200	U	78000	UJ	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
4-Nitrophenol	990	U	35000	U	1200	U	78000	UJ	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Dibenzofuran	390	U	14000	U	460	U	31000	U	450	U	420		120	J	12000	U	420	U	340	U
2,4-Dinitrotoluene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Diethylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Fluorene	390	U	10000	J	460	U	5500	J	450	U	280	J	85	J	22000		83	J	420	
4-Chlorophenyl-phenyl ether	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
4-Nitroaniline	990	U	35000	U	1200	U	78000	U	1100	UJ	1000	U	2000	U	30000	U	1100	UJ	860	UJ
4,6-Dinitro-2-methylphenol	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
N-Nitrosodiphenylamine	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
4-Bromophenyl-phenylether	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Hexachlorobenzene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Atrazine	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Pentachlorophenol	990	U	35000	R	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Phenanthrene	390	U	24000		460	U	29000	J	450	U	780		300	J	35000		190	J	1200	
Anthracene	390	U	5300	J	460	U	31000	U	450	U	210	J	110	J	9300	J	420	U	110	J
Carbazole	390	U	14000	U	460	U	31000	U	450	UJ	75	J	810	U	4000	J	420	UJ	340	UJ
Di-n-butylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Fluoranthene	390	U	3200	J	460	U	31000	U	450	U	78	J	810	U	2100	J	220	J	160	J
Pyrene	390	U	13000	J	460	U	150000		450	U	300	J	200	J	8000	J	990		1100	
Butylbenzylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
3,3'-Dichlorobenzidine	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
Benzo(a)anthracene	390	U	7000	J	460	U	60000		450	U	260	J	160	J	6300	J	310	J	340	J
Chrysene	390	U	9800	J	460	U	120000		450	U	400		280	J	7300	J	550		760	
bis(2-Ethylhexyl)phthalate	390	U	11000	J	460	U	31000	U	450	U	74	J	810	U	12000	U	10000		160	J
Di-n-octylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Benzo(b)fluoranthene	390	U	2800	J	460	U	16000	J	450	U	240	J	130	J	2900	J	110	J	230	J
Benzo(k)fluoranthene	390	U	2900	J	460	U	31000	UJ	450	U	220	J	140	J	3100	J	97	J	210	J
Benzo(a)pyrene	390	U	5700	J	460	U	31000		450	U	330	J	190	J	6600	J	120	J	330	J
Indeno(1,2,3-cd)pyrene	390	U	2000	J	460	U	7500	J	450	U	140	J	87	J	2400	J	420	U	100	J
Dibenzo(a,h)anthracene	390	U	3000	J	460	U	8400	J	450	U	180	J	110	J	4100	J	51	J	91	J
Benzo(g,h,i)perylene	390	U	3100	J	460	U	18000	J	450	U	640		380	J	3800	J	52	J	220	J

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 2

Analytical Results (Qualified Data)

Case # 28678
Site
Lab
Reviewer
Date

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number	EE01Z		EE020		EE021		EE022		EE025		EE026		EE027		EE028		EE029		EE02A	
Sampling Location	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled	15:50		16.50		16:55		17:10		10:00		10.25		12:00		12:15		15:45		16:00	
%Moisture	27		25		6		15		22		21		24		39		26		26	
pH	7.0		7.7		7.5		7.9		6.5		7.2		7.7		8.0		8.5		8.5	
Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Phenol	450	U	440	U	350	U	100	J	420	UJ	420	U	430	U	540	U	450	U	450	U
bis-(2-Chloroethyl) ether	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2-Chlorophenol	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
2-Methylphenol	450	U	440	U	350	U	58	J	420	U	420	U	430	U	540	U	450	U	450	U
2,2'-oxybis(1-Chloropropane)	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Acetophenone	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Methylphenol	450	U	440	U	350	U	110	J	420	U	420	U	430	U	540	U	450	U	450	U
N-Nitroso-di-n-propylamine	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
Hexachloroethane	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Nitrobenzene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Isophorone	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2-Nitrophenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,4-Dimethylphenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
bis(2-Chloroethoxy)methane	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,4-Dichlorophenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Naphthalene	450	U	440	U	350	U	180	J	420	U	420	U	430	U	540	U	450	U	660	
4-Chloroaniline	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Hexachlorobutadiene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Caprolactam	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Chloro-3-methylphenol	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
Methylnaphthalene	450	U	440	U	350	U	650		420	U	420	U	430	U	540	U	220	J	5100	
Hexachlorocyclopentadiene	450	UJ	440	U	350	UJ	390	UJ	420	U	420	U	430	U	540	U	450	U	450	U
2,4,6-Trichlorophenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,4,5-Trichlorophenol	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
1,1'-Biphenyl	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	86	J
2-Chloronaphthalene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2-Nitroaniline	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
Dimethylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,6-Dinitrotoluene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Acenaphthylene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
3-Nitroaniline	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
Acenaphthene	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	120	J
2,4-Dinitrophenol	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	UJ	1100	UJ	1100	U
4-Nitrophenol	1100	U	1100	U	880	U	980	U	1100	UJ	1100	U	1100	U	1400	U	1100	U	1100	U
Dibenzofuran	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	140	J
2,4-Dinitrotoluene	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
Diethylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Fluorene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	270	J
4-Chlorophenyl-phenyl ether	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Nitroaniline	1100	U	1100	UJ	880	U	980	U	1100	U	1100	UJ	1100	UJ	1400	UJ	1100	UJ	1100	U
4,6-Dinitro-2-methylphenol	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
N-Nitrosodiphenylamine	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Bromophenyl-phenylether	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Hexachlorobenzene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Atrazine	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Pentachlorophenol	1100	U	1100	U	880	U	980	U	1100	UJ	1100	UJ	1100	UJ	1400	U	1100	U	1100	U
Phenanthrene	450	U	440	U	350	U	160	J	420	U	420	U	430	U	540	U	140	J	770	
Anthracene	450	U	440	U	350	U	70	J	420	U	420	U	430	U	540	U	450	U	66	J
Carbazole	450	U	440	UJ	350	U	43	J	420	U	420	UJ	430	UJ	540	UJ	450	UJ	450	U
Di-n-butylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Fluoranthene	450	U	440	U	350	U	220	J	420	U	420	U	430	U	540	U	450	U	450	U
Pyrene	450	U	110	J	350	U	230	J	420	UJ	420	U	430	U	540	U	450	U	74	J
Butylbenzylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
3,3'-Dichlorobenzidine	450	U	440	U	350	U	390	U	420	U	420	UJ	430	UJ	540	U	450	U	450	U
Benzo(a)anthracene	450	U	440	U	350	U	160	J	420	U	420	U	430	U	540	U	450	U	450	U
Chrysene	450	U	74	J	350	U	190	J	420	U	420	U	430	U	540	U	450	U	450	U
bis(2-Ethylhexyl)phthalate	450	U	45	J	73	J	69	J	420	U	420	U	430	U	60	J	450	U	450	U
Di-n-octylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(b)fluoranthene	450	U	440	U	350	U	130	J	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(k)fluoranthene	450	U	440	U	350	U	120	J	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(a)pyrene	450	U	440	U	350	U	100	J	420	U	420	U	430	U	540	U	450	U	450	U
Indeno(1,2,3-cd)pyrene	450	U	440	U	350	U	86	J	420	U	420	U	430	U	540	U	450	U	450	U
Dibenzo(a,h)anthracene	450	U	440	U	350	U	56	J	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(g,h,i)perylene	450	U	440	U	350	U	190	J	420	U	420	U	430	U	540	U	450	U	450	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 3

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01B
CLARK OIL
LIBRTY

Sample Number :	EE01B		EE01C		EE01D		EE01E		EE01F		EE01G		EE01H		EE01J		EE01K		EE01L	
Sampling Location :	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/02/2000		11/02/2000	
Time Sampled :	11:30		11:30		12:50		13:10		15:00		15:20		16:00		16:45		08:15		09:25	
%Moisture :	0		29		16		21		8		21		18		25		20		20	
pH :	0.0		7.7		7.7		8.0		6.6		7.9		7.7		8.4		5.8		8.5	
Dilution Factor :	1.0		1.0		5.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	2.1	U	0.61	J	2.1	U	2.1	U
beta-BHC	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	1.4	J	2.3	U	2.1	U	2.1	U
delta-BHC	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	2.1	U
gamma-BHC (Lindane)	51	U	0.75	J	10	U	2.2	U	1.9	U	2.2	U	0.23	J	2.3	U	2.1	U	1.9	J
Heptachlor	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	2.1	U
Aldrin	51	U	2.4	U	18		2.2	U	1.9	U	2.2	U	0.47	J	0.88	J	2.1	U	0.82	J
Heptachlor epoxide	4.3	J	2.4	U	9.8	J	2.2	U	1.9	U	2.2	U	2.1	U	0.055	J	2.1	U	2.1	U
Endosulfan I	1.0	J	2.4	U	3.6	J	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	2.1	U
Dieldrin	99	U	4.7	U	680		4.2	U	3.6	U	4.2	U	4.0	U	0.042	J	4.1	U	1.8	J
4,4'-DDE	6.7	J	4.7	U	300	J	4.2	U	3.6	U	4.2	U	4.0	U	0.32	J	4.1	U	3.1	J
Endrin	27	J	2.8	J	20	U	4.2	U	3.6	U	4.2	U	1.0	J	0.41	J	4.1	U	1.2	J
Endosulfan II	99	U	4.7	U	20	U	4.2	U	3.6	U	4.2	U	4.0	U	4.4	U	4.1	U	4.1	U
4,4'-DDD	31	J	2.0	J	3900		4.2	U	3.6	U	4.2	U	4.0	U	4.4	U	4.1	U	4.0	J
Endosulfan sulfate	99	U	4.7	U	49	J	4.2	U	3.6	U	4.2	U	4.0	U	0.20	J	4.1	U	1.2	J
4,4'-DDT	43	J	4.7	U	60	J	4.2	U	3.6	U	4.2	U	4.0	U	4.4	U	4.1	U	2.8	J
Methoxychlor	35	J	24	U	100	U	22	U	18	U	22	U	21	U	1.7	J	21	U	1.5	J
Endrin ketone	7.8	J	1.1	J	6.7	J	4.2	U	3.6	U	4.2	U	1.7	J	0.19	J	4.1	U	4.1	U
Endrin aldehyde	17	J	1.6	J	170		4.2	U	3.6	U	4.2	U	1.4	J	0.28	J	4.1	U	2.5	J
alpha-Chlordane	4.7	J	0.39	J	110	J	0.059	J	1.9	U	2.2	U	2.1	U	0.25	J	2.1	U	3.0	J
gamma-Chlordane	51	U	1.1	J	10	U	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	6.8	
Toxaphene	5100	U	240	U	1000	U	220	U	180	U	220	U	210	U	230	U	210	U	210	U
Aroclor-1016	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1221	2000	U	94	U	400	U	85	U	73	U	85	U	82	U	89	U	84	U	84	U
Aroclor-1232	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1242	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1248	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1254	990	U	46	U	4100	J	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1260	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 3

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01M		EE01N		EE01P		EE01Q		EE01R		EE01S		EE01T		EE01W		EE01X		EE01Y	
Sampling Location :	X111		X112		X113		X114		X115		X116		X117		X118		X119		X120	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000	
Time Sampled :	09:35		10:05		11:05		12:00		12:15		13:25		13:25		14:20		14:35		15:40	
%Moisture :	16		29		29		4		26		18		19		18		22		4	
pH :	7.9		7.9		7.6		7.4		7.1		7.6		6.9		8.0		8.4		8.3	
Dilution Factor :	1.0		1.0		1.0		2.0		1.0		1.0		1.0		2.0		1.0		2.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	67	J	2.2	U	0.87	J
beta-BHC	2.0	U	610	J	2.4	U	3.5	U	2.3	U	12	J	14	J	4.2	R	2.4	J	18	
delta-BHC	2.0	U	190	J	2.4	U	4.6	J	2.3	U	2.1	U	2.1	U	4.2	R	2.2	U	3.5	U
gamma-BHC (Lindane)	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	4.2	R	0.77	J	3.1	J
Heptachlor	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	140	J	2.2	U	3.5	U
Aldrin	2.0	U	100	J	2.4	U	3.5	U	2.3	U	3.8	J	4.6	J	20	J	1.2	J	15	J
Heptachlor epoxide	2.0	U	2.4	U	2.4	U	1.7	J	2.3	U	6.1	J	11	J	20	J	2.2	U	29	J
Endosulfan I	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	8.0	J	2.2	U	3.5	U
Dieldrin	3.9	U	15	J	4.7	U	36	J	4.5	U	12	J	17	J	40	J	4.2	U	58	J
4,4'-DDE	3.9	U	4.7	U	4.7	U	6.5	J	4.5	U	4.0	U	4.1	U	69	J	4.2	U	130	J
Endrin	3.9	U	23	J	4.7	U	5.2	J	4.5	U	23	J	12	J	50	J	3.5	J	110	J
Endosulfan II	3.9	U	6.8	J	4.7	U	4.0	J	4.5	U	4.0	U	4.1	U	8.1	R	4.2	U	6.9	U
4,4'-DDD	3.9	U	19	J	4.7	U	6.9	U	4.5	U	10	J	14	J	17	J	1.6	J	13	J
Endosulfan sulfate	3.9	U	4.7	U	4.7	U	6.9	U	4.5	U	13	J	18	J	8.1	R	4.2	U	66	J
4,4'-DDT	3.9	U	20	J	4.7	U	6.9	U	4.5	U	34	J	47	J	42	J	4.2	U	6.9	U
Methoxychlor	20	U	24	U	24	U	35	U	23	U	21	U	21	U	41	R	22	U	35	U
Endrin ketone	3.9	U	9.8	J	4.7	U	140	J	4.5	U	6.2	J	9.6	J	46	J	4.2	U	150	J
Endrin aldehyde	3.9	U	4.7	U	4.7	U	86	J	4.5	U	22	J	32	J	8.1	R	1.8	J	52	J
alpha-Chlordane	2.0	U	59	J	2.4	U	40	J	2.3	U	6.0	J	9.7	J	4.2	R	2.2	U	150	J
gamma-Chlordane	2.0	U	41	J	2.4	U	1.8	J	2.3	U	6.2	J	9.9	J	28	J	2.2	U	520	
Toxaphene	200	U	240	U	240	U	350	U	230	U	210	U	210	U	410	R	220	U	350	U
Aroclor-1016	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1221	80	U	94	U	94	U	140	U	91	U	82	U	83	U	160	R	86	U	140	U
Aroclor-1232	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1242	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1248	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1254	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1260	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 3

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01Z		EE020		EE021		EE022		EE025		EE026		EE027		EE028		EE029		EE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Moisture :	27		25		6		15		22		21		24		39		26		26	
pH :	7.0		7.7		7.5		7.9		6.5		7.2		7.7		8.0		8.5		8.5	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	2.3	U	2.2	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
beta-BHC	2.3	U	2.3	U	1.8	U	1.6	J	2.2	U	2.2	U	2.2	U	2.8	UJ	0.93	J	2.3	U
delta-BHC	2.3	U	2.0	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
gamma-BHC (Lindane)	2.3	U	4.0	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Heptachlor	2.3	U	2.3	U	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Aldrin	2.3	U	1.0	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Heptachlor epoxide	2.3	U	2.3	U	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Endosulfan I	2.3	U	2.3	U	1.8	U	0.52	J	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Dieldrin	4.5	U	1.5	J	3.5	U	19	J	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
4,4'-DDE	4.5	U	4.4	U	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endrin	4.5	U	4.0	J	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endosulfan II	4.5	U	4.4	U	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
4,4'-DDD	4.5	U	1.8	J	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endosulfan sulfate	4.5	U	4.4	U	3.5	U	25	J	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
4,4'-DDT	4.5	U	3.8	J	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Methoxychlor	23	U	15	J	18	U	51	J	22	U	22	U	22	U	28	UJ	23	U	23	U
Endrin ketone	4.5	U	3.6	J	3.5	U	84	J	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endrin aldehyde	4.5	U	1.7	J	3.5	U	10	J	4.2	U	4.2	U	4.3	U	5.4	UJ	1.7	J	4.5	U
alpha-Chlordane	2.3	U	1.6	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
gamma-Chlordane	2.3	U	1.5	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Toxaphene	230	U	230	U	180	U	200	U	220	U	220	U	220	U	280	UJ	230	U	230	U
Aroclor-1016	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1221	92	U	89	U	71	U	79	U	86	U	85	U	88	U	110	UJ	91	U	91	U
Aroclor-1232	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1242	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1248	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1254	45	U	44	U	35	U	1600	J	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1260	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 4

Analytical Results (Qualified Data) — Page 3

Case #: 28678 — SDG : MEE01B
Site : CLARK OIL
Lab. : LIBRTY
Reviewer : J. GANZ
Date : DECEMBER 12, 2000

Sample Number :	MEE01Z		MEE020		MEE021		MEE022		MEE025		MEE026		MEE027		MEE028		MEE029		MEE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Solids :	88.0		83.2		95.2		74.8		76.2		83.8		75.6		70.8		76.9		74.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	3950		5200		1630		5620		11400		4280		14400		14100		14700		6860	
ANTIMONY	0.52	UJ	0.53	UJ	0.45	UJ	0.58	UJ	0.61	J	0.51	R	0.64	J	0.65	R	0.60	R	0.65	J
ARSENIC	0.77	U	0.78	U	0.66	U	4.0	J	3.3		0.75	U	7.4		7.8		5.3		5.0	
BARIUM	40.6		56.5		26.6		125		171		50.1		187		322		256		161	
BERYLLIUM	0.17	J	0.24	J	0.090	J	0.59		0.83		0.35	J	0.93		1.0		0.87		0.51	J
CADMIUM	0.070	U	0.070	U	0.060	U	0.43	J	0.080	U	0.070	U	0.16	J	0.15	J	0.080	U	0.080	U
CALCIUM	879		2320		556		149000		4230		1560		11300		9900		7750		23900	
CHROMIUM	6.9		9.3		5.7		47.1		15.8		7.8		86.0		18.1		17.3		11.4	
COBALT	2.9		3.6		3.0		7.1		5.6		3.8		9.1		8.6		8.1		8.4	
COPPER	7.3		9.9		4.0		45.1		20.1		8.1		25.2		26.9		25.4		16.3	
IRON	4690		7740		3480		12500		16400		7740		23300		21900		19900		17300	
LEAD	4.3		7.4		2.7		73.7		20.6		5.9		45.2		18.7		21.5		13.8	
MAGNESIUM	972		1400		633		7220		2630		1470		3860		5190		4130		8360	
MANGANESE	30.6		228		34.9		418		372		48.4		825		473		601		516	
MERCURY	0.090	J	0.10	J	0.070	J	0.16	J	0.10	J	0.050	J	0.18	J	0.10	J	0.070	J	0.090	J
NICKEL	7.9		10.8		8.1		19.8		14.9	J	9.9	J	22.3	J	23.3	J	21.7	J	21.6	J
POTASSIUM	372		643		140		1180		1090	J	422	J	1420	J	2370	J	1470	J	1320	J
SELENIUM	0.98	UJ	0.98	UJ	0.84	UJ	1.1	UJ	1.5	J	1.6	J	1.8	J	1.2	UJ	1.1	UJ	1.2	UJ
SILVER	0.090	U	0.090	U	0.080	U	0.10	U	0.10	U	0.090	U	0.10	U	0.11	U	0.10	U	0.11	U
SODIUM	207	J	344	J	167	J	353	J	195	J	206	J	346	J	354	J	377	J	443	J
THALLIUM	3.3	J	5.3		2.0	J	3.0	J	11.7		5.0	J	15.4		13.3		13.2		9.9	
VANADIUM	12.2		12.0		10.4		25.2		25.6		13.3		34.9		34.7		30.5		21.7	
ZINC	16.3		27.6		10.2		427		66.7		25.1		92.4		70.5		62.1		48.3	
CYANIDE	0.050	U	0.050	U	0.050	U	0.060	U	*		*		*		*		*		*	

* -- No results reported from Laboratory.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 4

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : MEE01B
CLARK OIL
LIBRTY
J. GANZ
DECEMBER 12, 2000

Sample Number :	MEE01Z		MEE020		MEE021		MEE022		MEE025		MEE026		MEE027		MEE028		MEE029		MEE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Solids :	88.0		83.2		95.2		74.8		76.2		83.8		75.6		70.8		76.9		74.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	3950		5200		1630		5620		11400		4280		14400		14100		14700		6860	
ANTIMONY	0.52	UJ	0.53	UJ	0.45	UJ	0.58	UJ	0.61	J	0.51	R	0.64	J	0.65	R	0.60	R	0.65	J
ARSENIC	0.77	U	0.78	U	0.66	U	4.0	J	3.3		0.75	U	7.4		7.8		5.3		5.0	
BARIUM	40.6		56.5		26.6		125		171		50.1		187		322		256		161	
BERYLLIUM	0.17	J	0.24	J	0.090	J	0.59		0.83		0.35	J	0.93		1.0		0.87		0.51	J
CADMIUM	0.070	U	0.070	U	0.060	U	0.43	J	0.080	U	0.070	U	0.16	J	0.15	J	0.080	U	0.080	U
CALCIUM	879		2320		556		149000		4230		1560		11300		9900		7750		23900	
CHROMIUM	6.9		9.3		5.7		47.1		15.8		7.8		86.0		18.1		17.3		11.4	
COBALT	2.9		3.6		3.0		7.1		5.6		3.8		9.1		8.6		8.1		8.4	
COPPER	7.3		9.9		4.0		45.1		20.1		8.1		25.2		26.9		25.4		16.3	
IRON	4690		7740		3480		12500		16400		7740		23300		21900		19900		17300	
LEAD	4.3		7.4		2.7		73.7		20.6		5.9		45.2		18.7		21.5		13.8	
MAGNESIUM	972		1400		633		7220		2630		1470		3860		5190		4130		8360	
MANGANESE	30.6		228		34.9		418		372		48.4		825		473		601		516	
MERCURY	0.090	J	0.10	J	0.070	J	0.16	J	0.10	J	0.050	J	0.18	J	0.10	J	0.070	J	0.090	J
NICKEL	7.9		10.8		8.1		19.8		14.9	J	9.9	J	22.3	J	23.3	J	21.7	J	21.6	J
POTASSIUM	372		643		140		1180		1090	J	422	J	1420	J	2370	J	1470	J	1320	J
SELENIUM	0.98	UJ	0.98	UJ	0.84	UJ	1.1	UJ	1.5	J	1.6	J	1.8	J	1.2	UJ	1.1	UJ	1.2	UJ
SILVER	0.090	U	0.090	U	0.080	U	0.10	U	0.10	U	0.090	U	0.10	U	0.11	U	0.10	U	0.11	U
SODIUM	207	J	344	J	167	J	353	J	195	J	206	J	346	J	354	J	377	J	443	J
THALLIUM	3.3	J	5.3		2.0	J	3.0	J	11.7		5.0	J	15.4		13.3		13.2		9.9	
VANADIUM	12.2		12.0		10.4		25.2		25.6		13.3		34.9		34.7		30.5		21.7	
ZINC	16.3		27.6		10.2		427		66.7		25.1		92.4		70.5		62.1		48.3	
CYANIDE	0.050	U	0.050	U	0.050	U	0.060	U	*		*		*		*		*		*	

* -- No results reported from Laboratory.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

TABLE 4

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : MEE01B
CLARK OIL
LIBRTY
J. GANZ
DECEMBER 12, 2000

Sample Number :	MEE01Z		MEE020		MEE021		MEE022		MEE025		MEE026		MEE027		MEE028		MEE029		MEE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Solids :	88.0		83.2		95.2		74.8		76.2		83.8		75.6		70.8		76.9		74.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	3950		5200		1630		5620		11400		4280		14400		14100		14700		6860	
ANTIMONY	0.52	UJ	0.53	UJ	0.45	UJ	0.58	UJ	0.61	J	0.51	R	0.64	J	0.65	R	0.60	R	0.65	J
ARSENIC	0.77	U	0.78	U	0.66	U	4.0	J	3.3		0.75	U	7.4		7.8		5.3		5.0	
BARIUM	40.6		56.5		26.6		125		171		50.1		187		322		256		161	
BERYLLIUM	0.17	J	0.24	J	0.090	J	0.59		0.83		0.35	J	0.93		1.0		0.87		0.51	J
CADMIUM	0.070	U	0.070	U	0.060	U	0.43	J	0.080	U	0.070	U	0.16	J	0.15	J	0.080	U	0.080	U
CALCIUM	879		2320		556		149000		4230		1560		11300		9900		7750		23900	
CHROMIUM	6.9		9.3		5.7		47.1		15.8		7.8		86.0		18.1		17.3		11.4	
COBALT	2.9		3.6		3.0		7.1		5.6		3.8		9.1		8.6		8.1		8.4	
COPPER	7.3		9.9		4.0		45.1		20.1		8.1		25.2		26.9		25.4		16.3	
IRON	4690		7740		3480		12500		16400		7740		23300		21900		19900		17300	
LEAD	4.3		7.4		2.7		73.7		20.6		5.9		45.2		18.7		21.5		13.8	
MAGNESIUM	972		1400		633		7220		2630		1470		3860		5190		4130		8360	
MANGANESE	30.6		228		34.9		418		372		48.4		825		473		601		516	
MERCURY	0.090	J	0.10	J	0.070	J	0.16	J	0.10	J	0.050	J	0.18	J	0.10	J	0.070	J	0.090	J
NICKEL	7.9		10.8		8.1		19.8		14.9	J	9.9	J	22.3	J	23.3	J	21.7	J	21.6	J
POTASSIUM	372		643		140		1180		1090	J	422	J	1420	J	2370	J	1470	J	1320	J
SELENIUM	0.98	UJ	0.98	UJ	0.84	UJ	1.1	UJ	1.5	J	1.6	J	1.8	J	1.2	UJ	1.1	UJ	1.2	UJ
SILVER	0.090	U	0.090	U	0.080	U	0.10	U	0.10	U	0.090	U	0.10	U	0.11	U	0.10	U	0.11	U
SODIUM	207	J	344	J	167	J	353	J	195	J	206	J	346	J	354	J	377	J	443	J
THALLIUM	3.3	J	5.3		2.0	J	3.0	J	11.7		5.0	J	15.4		13.3		13.2		9.9	
VANADIUM	12.2		12.0		10.4		25.2		25.6		13.3		34.9		34.7		30.5		21.7	
ZINC	16.3		27.6		10.2		427		66.7		25.1		92.4		70.5		62.1		48.3	
CYANIDE	0.050	U	0.050	U	0.050	U	0.060	U	*		*		*		*		*		*	

* -- No results reported from Laboratory.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 5

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01B
CLARK OIL
LIBRTY

Sample Number :	EE01B		EE01C		EE01D		EE01E		EE01F		EE01G		EE01H		EE01J		EE01K		EE01L	
Sampling Location :	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/02/2000		11/02/2000	
Time Sampled :	11:30		11:30		12:50		13:10		15:00		15:20		16:00		16:45		08:15		09:25	
%Moisture :	0		29		16		22		8		21		18		25		20		20	
pH :																				
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	19	U	14	UJ	11	U	11	UJ	10	UJ	1100	UJ	1100	UJ	22	U	12	U	11	U
Chloromethane	19	U	14	U	11	U	11	U	10	U	1100	UJ	1100	UJ	22	U	12	U	11	U
Vinyl Chloride	19	U	14	U	11	U	11	U	10	U	1100	UJ	1100	UJ	22	U	12	U	11	U
Bromomethane	19	U	14	U	11	U	11	U	10	U	1100	UJ	160	J	22	U	12	U	11	U
Chloroethane	19	U	14	U	11	U	11	U	10	U	1100	UJ	1100	UJ	22	U	12	U	11	U
Trichlorofluoromethane	19	U	14	UJ	11	U	11	UJ	1	J	1100	UJ	1100	UJ	22	U	12	U	11	U
1,1-Dichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,1,2-Trichloro-1,2,2-trifluoroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Acetone	110	J	36	UJ	50	J	11	U	200	J	1100	U	1100	U	200	J	11	J	19	UJ
Carbon Disulfide	19	U	2	J	11	U	11	UJ	2	J	1100	U	1100	U	22	U	12	U	11	U
Methyl Acetate	8	J	14	UJ	11	UJ	11	UJ	10	UJ	1100	U	1100	U	22	UJ	6	J	11	UJ
Methylene Chloride	19	U	14	U	11	U	11	U	16	U	1100	U	140	J	22	U	16		11	U
trans-1,2-Dichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Methyl tert-Butyl Ether	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,1-Dichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
cis-1,2-Dichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
2-Butanone	23	J	6	J	9	J	11	UJ	10	UJ	1100	U	1100	U	22	UJ	12	UJ	11	U
Chloroform	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	1	J
1,1,1-Trichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Cyclohexane	4	J	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	1	J
Carbon Tetrachloride	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Benzene	19	U	14	U	11	U	2	J	10	U	200	J	1400	J	6	J	12	U	2	J
1,2-Dichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Trichloroethene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Methylcyclohexane	4	J	14	U	11	U	4	J	10	U	9100		2800	J	180		12	U	3	J
1,2-Dichloropropane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Bromodichloromethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
cis-1,3-Dichloropropene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
4-Methyl-2-pentanone	12	J	14	UJ	11	U	11	UJ	10	UJ	1100	U	1100	U	22	U	12	U	11	U
Toluene	19	U	4	J	2	J	3	J	9	J	1100	U	810	J	22	U	2	J	3	J
trans-1,3-Dichloropropene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,1,2-Trichloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Tetrachloroethene	19	U	1	J	11	U	2	J	2	J	1100	U	1100	U	22	U	2	J	11	U
2-Hexanone	19	U	14	UJ	11	U	11	UJ	10	UJ	1100	U	1100	U	22	U	12	U	11	U
Dibromochloromethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2-Dibromoethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Chlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Ethylbenzene	19	U	14	U	11	U	11	U	5	J	1400		5300	J	22	U	12	U	11	U
Xylenes (total)	19	U	42		11	U	11	U	10		180	J	35000	J	220		12	U	5	J
Styrene	19	U	14	U	11	U	11	U	10	U	1100	U	150	J	22	U	12	U	11	U
Bromoform	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
Isopropylbenzene	19	U	14	U	11	U	11	U	10		420	J	400	J	13	J	12	U	11	U
1,1,2,2-Tetrachloroethane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,3-Dichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,4-Dichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2-Dichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2-Dibromo-3-chloropropane	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U
1,2,4-Trichlorobenzene	19	U	14	U	11	U	11	U	10	U	1100	U	1100	U	22	U	12	U	11	U

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES

TABLE 5

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01M		EE01N		EE01P		EE01Q		EE01R		EE01S		EE01T		EE01W		EE01X		EE01Y	
Sampling Location :	X111		X112		X113		X114		X115		X116		X117		X118		X119		X120	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000	
Time Sampled :	09:35		10:05		11:05		12:00		12:15		13:25		13:25		14:20		14:35		15:40	
%Moisture :	16		29		29		4		26		18		19		18		22		4	
pH :																				
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	12	U	70	U	14	U	8000	UJ	13	U	14	U	14	U	20	U	64	U	9	U
Chloromethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Vinyl Chloride	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Bromomethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Chloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Trichlorofluoromethane	12	U	70	U	14	U	8000	UJ	13	U	14	U	14	U	20	U	64	U	9	U
1,1-Dichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1,2-Trichloro-1,2,2-trifluoroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Acetone	43	J	70	UJ	23	J	8000	UJ	34	UJ	49	J	52	J	20	UJ	210	J	130	J
Carbon Disulfide	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Methyl Acetate	12	UJ	70	UJ	14	UJ	8000	U	13	UJ	14	UJ	14	UJ	20	UJ	64	UJ	9	UJ
Methylene Chloride	17		70	U	22		8000	U	14	U	14	U	14	U	20	U	64	U	9	U
trans-1,2-Dichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Methyl tert-Butyl Ether	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1-Dichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
cis-1,2-Dichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
2-Butanone	23	J	70	U	5	J	8000	UJ	6	J	9	J	14	U	20	U	33	J	22	
Chloroform	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1,1-Trichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Cyclohexane	12	U	200		14	U	58000		1	J	14	U	14	U	20	U	64	U	9	U
Carbon Tetrachloride	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Benzene	12	U	70	U	14	U	7100	J	3	J	14	U	14	U	20	U	64	U	9	U
1,2-Dichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Trichloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Methylcyclohexane	1	J	710		14	U	130000		13	U	14	U	14	U	20	U	64	U	1	J
1,2-Dichloropropane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Bromodichloromethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
cis-1,3-Dichloropropene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
4-Methyl-2-pentanone	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Toluene	2	J	16	J	3	J	1800	J	2	J	2	J	14	U	20	U	64	U	2	J
trans-1,3-Dichloropropene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,1,2-Trichloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Tetrachloroethene	12	U	70	U	14	U	8000	U	13	U	14	U	1	J	3	J	64	U	9	U
2-Hexanone	12	U	70	UJ	14	U	8000	UJ	13	U	14	U	14	UJ	20	UJ	64	UJ	9	UJ
Dibromochloromethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2-Dibromoethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Chlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Ethylbenzene	12	U	30	J	14	U	10000		13	U	14	U	14	U	20	U	64	U	9	U
Xylenes (total)	12	U	1000		14	U	34000		2	J	14	U	14	U	20	U	64	U	4	J
Styrene	12	U	20	J	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Bromoform	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
Isopropylbenzene	12	U	39	J	14	U	2900	J	13	U	14	U	14	U	20	U	64	U	9	U
1,1,2,2-Tetrachloroethane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,3-Dichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,4-Dichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2-Dichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2-Dibromo-3-chloropropane	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U
1,2,4-Trichlorobenzene	12	U	70	U	14	U	8000	U	13	U	14	U	14	U	20	U	64	U	9	U

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY
HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 5

Analytical Results (Qualified Data) — Page 3

Case #: 28678 — SDG : EE01K
Site : CLARK OIL
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	EE01Z		EE020		EE021		EE022		EE025		EE026		EE027		EE028		EE029		EE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Moisture :	27		25		6		15		22		21		24		39		26		26	
pH :																				
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
									Background											
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Chloromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Vinyl Chloride	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Bromomethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Chloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Trichlorofluoromethane	12	U	13	U	12	U	10	U	1	J	14	UJ	11	UJ	16	UJ	2	J	16000	U
1,1-Dichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1,2-Trichloro-1,2,2-trifluoroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Acetone	23	J	17	J	21	J	24	J	49	J	14	UJ	160	J	29	UJ	49	J	24000	
Carbon Disulfide	12	U	13	U	12	U	10	U	11	UJ	14	UJ	2	J	16	UJ	4	J	16000	U
Methyl Acetate	12	UJ	13	UJ	12	UJ	10	UJ	11	UJ	14	UJ	11	UJ	16	UJ	12	UJ	16000	U
Methylene Chloride	15		13	U	16		10	U	11	U	24	U	18	U	17	U	17	U	4100	J
trans-1,2-Dichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Methyl tert-Butyl Ether	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1-Dichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
cis-1,2-Dichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
2-Butanone	12	UJ	13	UJ	4	J	10	UJ	4	J	14	UJ	23	J	16	UJ	12	UJ	16000	U
Chloroform	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1,1-Trichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Cyclohexane	12	U	13	U	12	U	2	J	11	U	14	U	11	U	16	U	12	U	16000	U
Carbon Tetrachloride	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Benzene	12	U	13	U	12	U	1	J	11	U	14	U	11	U	16	U	53		34000	J
1,2-Dichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Trichloroethene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Methylcyclohexane	12	U	13	U	12	U	3	J	11	U	14	U	11	U	16	U	120		89000	
1,2-Dichloropropane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Bromodichloromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
cis-1,3-Dichloropropene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
4-Methyl-2-pentanone	12	U	13	U	12	U	10	U	11	UJ	14	UJ	11	UJ	16	UJ	12	UJ	16000	U
Toluene	1	J	13	U	2	J	4	J	11	U	2	J	3	J	16	U	4	J	16000	U
trans-1,3-Dichloropropene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,1,2-Trichloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Tetrachloroethene	2	J	2	J	12	U	1	J	11	U	14	U	11	U	16	U	12	U	16000	U
2-Hexanone	12	U	13	U	12	U	10	U	11	UJ	14	UJ	11	UJ	16	UJ	12	UJ	16000	U
Dibromochloromethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,2-Dibromoethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Chlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Ethylbenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	3	J	110000	
Xylenes (total)	12	U	13	U	12	U	10	U	11	U	4	J	11	U	16	U	8	J	160000	
Styrene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Bromoform	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
Isopropylbenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	18		17000	
1,1,2,2-Tetrachloroethane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,3-Dichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,4-Dichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,2-Dichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U
1,2-Dibromo-3-chloropropane	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	UJ
1,2,4-Trichlorobenzene	12	U	13	U	12	U	10	U	11	U	14	U	11	U	16	U	12	U	16000	U

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CLARK OIL & REFINING COMPANY
HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 6

Analytical Results (Qualified Data) — Page 1

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01B
CLARK OIL
LIBRTY

Sample Number :	EE01B	EE01C	EE01D	EE01E	EE01F	EE01G	EE01H	EE01J	EE01K	EE01L
Sampling Location :	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
Matrix :	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Date Sampled :	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/1/00	11/02/2000	11/02/2000
Time Sampled :	11:30	11:30	12:50	13:10	15:00	15:20	16:00	16:45	08:15	09:25
%Moisture :	0	29	16	21	8	21	18	25	20	20
pH :	0.0	7.7	7.7	8.0	6.6	7.9	7.7	8.4	5.8	8.5
Dilution Factor :	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0

Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Phenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
bis-(2-Chloroethyl) ether	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Chlorophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Methylphenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,2'-oxybis(1-Chloropropane)	9000	UJ	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Acetophenone	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
4-Methylphenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
N-Nitroso-di-n-propylamine	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Hexachloroethane	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Nitrobenzene	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
Isophorone	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Nitrophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,4-Dimethylphenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
bis(2-Chloroethoxy)methane	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,4-Dichlorophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Naphthalene	9000	U	460	U	390	U	420	U	250	J	150	J	2500		440	U	410	U	410	U
4-Chloroaniline	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Hexachlorobutadiene	9000	UJ	460	UJ	390	UJ	420	UJ	360	UJ	420	UJ	800	UJ	440	UJ	410	U	410	U
Caprolactam	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
4-Chloro-3-methylphenol	9000	U	460	UJ	390	UJ	420	UJ	360	UJ	420	UJ	800	U	440	UJ	410	U	410	U
2-Methylnaphthalene	9000	U	460	U	110	J	420	U	890		1100		2000		440	U	410	U	73	J
Hexachlorocyclopentadiene	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
2,4,6-Trichlorophenol	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,4,5-Trichlorophenol	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
1,1'-Biphenyl	9000	U	460	U	390	U	420	U	360	U	420	U	110	J	440	U	410	U	410	U
2-Chloronaphthalene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2-Nitroaniline	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
Dimethylphthalate	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
2,6-Dinitrotoluene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Acenaphthylene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
3-Nitroaniline	23000	UJ	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
Acenaphthene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	50	J	410	U	200	J
2,4-Dinitrophenol	23000	U	1200	UJ	990	UJ	1100	UJ	900	UJ	1100	UJ	2000	U	1100	UJ	1000	U	1000	U
4-Nitrophenol	23000	UJ	1200	UJ	990	UJ	1100	UJ	900	UJ	1100	UJ	2000	UJ	1100	UJ	1000	U	1000	U
Dibenzofuran	9000	U	460	U	42	J	420	U	360	U	420	U	800	U	47	J	410	U	410	U
2,4-Dinitrotoluene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Diethylphthalate	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Fluorene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	66	J	410	U	100	J
4-Chlorophenyl-phenyl ether	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
4-Nitroaniline	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	UJ
4,6-Dinitro-2-methylphenol	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
N-Nitrosodiphenylamine	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
4-Bromophenyl-phenylether	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Hexachlorobenzene	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Atrazine	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Pentachlorophenol	23000	U	1200	U	990	U	1100	U	900	U	1100	U	2000	U	1100	U	1000	U	1000	U
Phenanthrene	9000	U	460	U	250	J	420	U	360	U	420	U	180	J	69	J	410	U	280	J
Anthracene	9000	U	460	U	50	J	420	U	360	U	420	U	800	U	440	U	410	U	200	J
Carbazole	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	UJ
Di-n-butylphthalate	9000	U	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Fluoranthene	9000	U	460	UJ	260	J	420	UJ	360	UJ	420	UJ	800	U	440	UJ	410	U	410	U
Pyrene	9000	U	200	J	350	J	420	U	360	U	420	U	370	J	46	J	410	U	2000	
Butylbenzylphthalate	9000	UJ	460	U	390	U	420	U	360	U	420	U	800	U	440	U	410	U	410	U
3,3'-Dichlorobenzidine	9000	U	460	U	390	U	420	U	360	U	420	U	800	UJ	440	U	410	U	410	U
Benzo(a)anthracene	9000	U	460	U	130	J	420	U	360	U	420	U	800	U	440	U	410	U	410	J
Chrysene	9000	U	96	J	160	J	420	U	360	U	420	U	120	J	440	U	410	U	920	
bis(2-Ethylhexyl)phthalate	9000	U	220	J	52	J	420	U	850		600		800	U	460		410	U	3500	
Di-n-octylphthalate	9000	U	1000		390	U	120	J	360	U	420	U	800	U	440	U	410	U	410	U
Benzo(b)fluoranthene	9000	U	460	U	240	J	420	U	360	U	420	U	800	U	440	U	410	U	180	J
Benzo(k)fluoranthene	9000	U	460	U	190	J	420	U	360	U	420	U	800	UJ	440	U	410	U	160	J
Benzo(a)pyrene	9000	U	460	U	130	J	420	U	360	U	420	U	800	U	440	U	410	U	330	J
Indeno(1,2,3-cd)pyrene	9000	U	460	U	91	J	420	U	360	U	420	U	800	U	440	U	410	U	55	J
Dibenzo(a,h)anthracene	9000	U	460	U	45	J	420	U	360	U	420	U	800	U	440	U	410	U	410	U
Benzo(g,h,i)perylene	9000	U	460	U	100	J	420	U	360	U	420	U	800	U	440	U	410	U	170	J

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY
HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 6

Analytical Results (Qualified Data) — Page 2

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01M	EE01N	EE01P	EE01Q	EE01R	EE01S	EE01T	EE01W	EE01X	EE01Y
Sampling Location :	X111	X112	X113	X114	X115	X116	X117	X118	X119	X120
Matrix :	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Date Sampled :	11/02/2000	11/02/2000	11/02/2000	11/02/2000	11/02/2000	11/02/2000	11/02/2000	11/02/2000	11/02/2000	11/02/2000
Time Sampled :	09:35	10:05	11:05	12:00	12:15	13:25	13:25	14:20	14:35	15:40
%Moisture :	16	29	29	4	26	18	19	18	22	4
pH :	7.9	7.9	7.6	7.4	7.1	7.6	6.9	8.0	8.4	8.3
Dilution Factor :	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0

Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Phenol	390	U	80000	J	460	U	31000	U	450	U	2000		450	J	130000		420	U	84	J
bis-(2-Chloroethyl) ether	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Chlorophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Methylphenol	390	U	2300	J	460	U	31000	U	450	U	800		260	J	4100	J	420	U	52	J
2,2'-oxybis(1-Chloropropane)	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Acetophenone	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
4-Methylphenol	390	U	30000		460	U	31000	U	450	U	1600		460	J	51000		46	J	120	J
N-Nitroso-di-n-propylamine	390	U	14000	UJ	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Hexachloroethane	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Nitrobenzene	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
Isophorone	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Nitrophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,4-Dimethylphenol	390	U	2900	J	460	U	31000	U	450	U	380	J	130	J	12000	U	420	U	340	U
bis(2-Chloroethoxy)methane	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,4-Dichlorophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Naphthalene	390	U	21000		460	U	31000	U	450	U	2200		960		19000		420	U	450	
4-Chloroaniline	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Hexachlorobutadiene	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
Caprolactam	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
4-Chloro-3-methylphenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Methylnaphthalene	390	U	94000		460	U	7000	J	50	J	10000		2800		100000		89	J	1900	
Hexachlorocyclopentadiene	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	UJ	12000	U	420	U	340	U
2,4,6-Trichlorophenol	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,4,5-Trichlorophenol	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
1,1'-Biphenyl	390	U	5500	J	460	U	31000	U	450	U	200	J	110	J	5100	J	420	U	340	U
2-Chloronaphthalene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2-Nitroaniline	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Dimethylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
2,6-Dinitrotoluene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Acenaphthylene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
3-Nitroaniline	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Acenaphthene	390	U	6500	J	460	U	31000	U	450	U	140	J	810	U	10000	J	420	U	120	J
2,4-Dinitrophenol	990	U	35000	U	1200	U	78000	UJ	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
4-Nitrophenol	990	U	35000	U	1200	U	78000	UJ	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Dibenzofuran	390	U	14000	U	460	U	31000	U	450	U	420		120	J	12000	U	420	U	340	U
2,4-Dinitrotoluene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Diethylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Fluorene	390	U	10000	J	460	U	5500	J	450	U	280	J	85	J	22000		83	J	420	
4-Chlorophenyl-phenyl ether	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
4-Nitroaniline	990	U	35000	U	1200	U	78000	U	1100	UJ	1000	U	2000	U	30000	U	1100	UJ	860	UJ
4,6-Dinitro-2-methylphenol	990	U	35000	U	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
N-Nitrosodiphenylamine	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
4-Bromophenyl-phenylether	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Hexachlorobenzene	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Atrazine	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Pentachlorophenol	990	U	35000	R	1200	U	78000	U	1100	U	1000	U	2000	U	30000	U	1100	U	860	U
Phenanthrene	390	U	24000		460	U	29000	J	450	U	780		300	J	35000		190	J	1200	
Anthracene	390	U	5300	J	460	U	31000	U	450	U	210	J	110	J	9300	J	420	U	110	J
Carbazole	390	U	14000	U	460	U	31000	U	450	UJ	75	J	810	U	4000	J	420	UJ	340	UJ
Di-n-butylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Fluoranthene	390	U	3200	J	460	U	31000	U	450	U	78	J	810	U	2100	J	220	J	160	J
Pyrene	390	U	13000	J	460	U	150000		450	U	300	J	200	J	8000	J	990		1100	
Butylbenzylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
3,3'-Dichlorobenzidine	390	U	14000	U	460	U	31000	UJ	450	U	400	U	810	U	12000	U	420	U	340	U
Benzo(a)anthracene	390	U	7000	J	460	U	60000		450	U	260	J	160	J	6300	J	310	J	340	J
Chrysene	390	U	9800	J	460	U	120000		450	U	400		280	J	7300	J	550		760	
bis(2-Ethylhexyl)phthalate	390	U	11000	J	460	U	31000	U	450	U	74	J	810	U	12000	U	10000		160	J
Di-n-octylphthalate	390	U	14000	U	460	U	31000	U	450	U	400	U	810	U	12000	U	420	U	340	U
Benzo(b)fluoranthene	390	U	2800	J	460	U	16000	J	450	U	240	J	130	J	2900	J	110	J	230	J
Benzo(k)fluoranthene	390	U	2900	J	460	U	31000	UJ	450	U	220	J	140	J	3100	J	97	J	210	J
Benzo(a)pyrene	390	U	5700	J	460	U	31000		450	U	330	J	190	J	6600	J	120	J	330	J
Indeno(1,2,3-cd)pyrene	390	U	2000	J	460	U	7500	J	450	U	140	J	87	J	2400	J	420	U	100	J
Dibenzo(a,h)anthracene	390	U	3000	J	460	U	8400	J	450	U	180	J	110	J	4100	J	51	J	91	J
Benzo(g,h,i)perylene	390	U	3100	J	460	U	18000	J	450	U	640		380	J	3800	J	52	J	220	J

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 6

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01Z		EE020		EE021		EE022		EE025		EE026		EE027		EE028		EE029		EE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Moisture :	27		25		6		15		22		21		24		39		26		26	
pH :	7.0		7.7		7.5		7.9		6.5		7.2		7.7		8.0		8.5		8.5	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
									Background											
Semivolatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Phenol	450	U	440	U	350	U	100	J	420	UJ	420	U	430	U	540	U	450	U	450	U
bis-(2-Chloroethyl) ether	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2-Chlorophenol	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
2-Methylphenol	450	U	440	U	350	U	58	J	420	U	420	U	430	U	540	U	450	U	450	U
2,2'-oxybis(1-Chloropropane)	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Acetophenone	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Methylphenol	450	U	440	U	350	U	110	J	420	U	420	U	430	U	540	U	450	U	450	U
N-Nitroso-di-n-propylamine	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
Hexachloroethane	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Nitrobenzene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Isophorone	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2-Nitrophenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,4-Dimethylphenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
bis(2-Chloroethoxy)methane	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,4-Dichlorophenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Naphthalene	450	U	440	U	350	U	180	J	420	U	420	U	430	U	540	U	450	U	660	
4-Chloroaniline	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Hexachlorobutadiene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Caprolactam	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Chloro-3-methylphenol	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
2-Methylnaphthalene	450	U	440	U	350	U	650		420	U	420	U	430	U	540	U	220	J	5100	
Hexachlorocyclopentadiene	450	UJ	440	U	350	UJ	390	UJ	420	U	420	U	430	U	540	U	450	U	450	U
2,4,6-Trichlorophenol	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,4,5-Trichlorophenol	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
1,1'-Biphenyl	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	86	J
2-Chloronaphthalene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2-Nitroaniline	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
Dimethylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
2,6-Dinitrotoluene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Acenaphthylene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
3-Nitroaniline	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
Acenaphthene	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	120	J
2,4-Dinitrophenol	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	UJ	1100	UJ	1100	U
4-Nitrophenol	1100	U	1100	U	880	U	980	U	1100	UJ	1100	U	1100	U	1400	U	1100	U	1100	U
Dibenzofuran	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	140	J
2,4-Dinitrotoluene	450	U	440	U	350	U	390	U	420	UJ	420	U	430	U	540	U	450	U	450	U
Diethylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Fluorene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	270	J
4-Chlorophenyl-phenyl ether	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Nitroaniline	1100	U	1100	UJ	880	U	980	U	1100	U	1100	UJ	1100	UJ	1400	UJ	1100	UJ	1100	U
4,6-Dinitro-2-methylphenol	1100	U	1100	U	880	U	980	U	1100	U	1100	U	1100	U	1400	U	1100	U	1100	U
N-Nitrosodiphenylamine	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
4-Bromophenyl-phenylether	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Hexachlorobenzene	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Atrazine	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Pentachlorophenol	1100	U	1100	U	880	U	980	U	1100	UJ	1100	UJ	1100	UJ	1400	U	1100	U	1100	U
Phenanthrene	450	U	440	U	350	U	160	J	420	U	420	U	430	U	540	U	140	J	770	
Anthracene	450	U	440	U	350	U	70	J	420	U	420	U	430	U	540	U	450	U	66	J
Carbazole	450	U	440	UJ	350	U	43	J	420	U	420	UJ	430	UJ	540	UJ	450	UJ	450	U
Di-n-butylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Fluoranthene	450	U	440	U	350	U	220	J	420	U	420	U	430	U	540	U	450	U	450	U
Pyrene	450	U	110	J	350	U	230	J	420	UJ	420	U	430	U	540	U	450	U	74	J
Butylbenzylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
3,3'-Dichlorobenzidine	450	U	440	U	350	U	390	U	420	U	420	UJ	430	UJ	540	U	450	U	450	U
Benzo(a)anthracene	450	U	440	U	350	U	160	J	420	U	420	U	430	U	540	U	450	U	450	U
Chrysene	450	U	74	J	350	U	190	J	420	U	420	U	430	U	540	U	450	U	450	U
bis(2-Ethylhexyl)phthalate	450	U	45	J	73	J	69	J	420	U	420	U	430	U	60	J	450	U	450	U
Di-n-octylphthalate	450	U	440	U	350	U	390	U	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(b)fluoranthene	450	U	440	U	350	U	130	J	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(k)fluoranthene	450	U	440	U	350	U	120	J	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(a)pyrene	450	U	440	U	350	U	100	J	420	U	420	U	430	U	540	U	450	U	450	U
Indeno(1,2,3-cd)pyrene	450	U	440	U	350	U	86	J	420	U	420	U	430	U	540	U	450	U	450	U
Dibenzo(a,h)anthracene	450	U	440	U	350	U	56	J	420	U	420	U	430	U	540	U	450	U	450	U
Benzo(g,h,i)perylene	450	U	440	U	350	U	190	J	420	U	420	U	430	U	540	U	450	U	450	U

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 7

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01B
CLARK OIL
LIBRTY

Sample Number :	EE01B		EE01C		EE01D		EE01E		EE01F		EE01G		EE01H		EE01J		EE01K		EE01L	
Sampling Location :	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/02/2000		11/02/2000	
Time Sampled :	11:30		11:30		12:50		13:10		15:00		15:20		16:00		16:45		08:15		09:25	
%Moisture :	0		29		16		21		8		21		18		25		20		20	
pH :	0.0		7.7		7.7		8.0		6.6		7.9		7.7		8.4		5.8		8.5	
Dilution Factor :	1.0		1.0		5.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	2.1	U	0.61	J	2.1	U	2.1	U
beta-BHC	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	1.4	J	2.3	U	2.1	U	2.1	U
delta-BHC	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	2.1	U
gamma-BHC (Lindane)	51	U	0.75	J	10	U	2.2	U	1.9	U	2.2	U	0.23	J	2.3	U	2.1	U	1.9	J
Heptachlor	51	U	2.4	U	10	U	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	2.1	U
Aldrin	51	U	2.4	U	18		2.2	U	1.9	U	2.2	U	0.47	J	0.88	J	2.1	U	0.82	J
Heptachlor epoxide	4.3	J	2.4	U	9.8	J	2.2	U	1.9	U	2.2	U	2.1	U	0.055	J	2.1	U	2.1	U
Endosulfan I	1.0	J	2.4	U	3.6	J	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	2.1	U
Dieldrin	99	U	4.7	U	680		4.2	U	3.6	U	4.2	U	4.0	U	0.042	J	4.1	U	1.8	J
4,4'-DDE	6.7	J	4.7	U	300	J	4.2	U	3.6	U	4.2	U	4.0	U	0.32	J	4.1	U	3.1	J
Endrin	27	J	2.8	J	20	U	4.2	U	3.6	U	4.2	U	1.0	J	0.41	J	4.1	U	1.2	J
Endosulfan II	99	U	4.7	U	20	U	4.2	U	3.6	U	4.2	U	4.0	U	4.4	U	4.1	U	4.1	U
4,4'-DDD	31	J	2.0	J	3900		4.2	U	3.6	U	4.2	U	4.0	U	4.4	U	4.1	U	4.0	J
Endosulfan sulfate	99	U	4.7	U	49	J	4.2	U	3.6	U	4.2	U	4.0	U	0.20	J	4.1	U	1.2	J
4,4'-DDT	43	J	4.7	U	60	J	4.2	U	3.6	U	4.2	U	4.0	U	4.4	U	4.1	U	2.8	J
Methoxychlor	35	J	24	U	100	U	22	U	18	U	22	U	21	U	1.7	J	21	U	1.5	J
Endrin ketone	7.8	J	1.1	J	6.7	J	4.2	U	3.6	U	4.2	U	1.7	J	0.19	J	4.1	U	4.1	U
Endrin aldehyde	17	J	1.6	J	170		4.2	U	3.6	U	4.2	U	1.4	J	0.28	J	4.1	U	2.5	J
alpha-Chlordane	4.7	J	0.39	J	110	J	0.059	J	1.9	U	2.2	U	2.1	U	0.25	J	2.1	U	3.0	J
gamma-Chlordane	51	U	1.1	J	10	U	2.2	U	1.9	U	2.2	U	2.1	U	2.3	U	2.1	U	6.8	
Toxaphene	5100	U	240	U	1000	U	220	U	180	U	220	U	210	U	230	U	210	U	210	U
Aroclor-1016	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1221	2000	U	94	U	400	U	85	U	73	U	85	U	82	U	89	U	84	U	84	U
Aroclor-1232	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1242	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1248	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1254	990	U	46	U	4100	J	42	U	36	U	42	U	40	U	44	U	41	U	41	U
Aroclor-1260	990	U	46	U	200	U	42	U	36	U	42	U	40	U	44	U	41	U	41	U

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 7

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01M		EE01N		EE01P		EE01Q		EE01R		EE01S		EE01T		EE01W		EE01X		EE01Y	
Sampling Location :	X111		X112		X113		X114		X115		X116		X117		X118		X119		X120	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/02/2000	
Time Sampled :	09:35		10:05		11:05		12:00		12:15		13:25		13:25		14:20		14:35		15:40	
%Moisture :	16		29		29		4		26		18		19		18		22		4	
pH :	7.9		7.9		7.6		7.4		7.1		7.6		6.9		8.0		8.4		8.3	
Dilution Factor :	1.0		1.0		1.0		2.0		1.0		1.0		1.0		2.0		1.0		2.0	
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	67	J	2.2	U	0.87	J
beta-BHC	2.0	U	610	J	2.4	U	3.5	U	2.3	U	12	J	14	J	4.2	R	2.4	J	18	
delta-BHC	2.0	U	190	J	2.4	U	4.6	J	2.3	U	2.1	U	2.1	U	4.2	R	2.2	U	3.5	U
gamma-BHC (Lindane)	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	4.2	R	0.77	J	3.1	J
Heptachlor	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	140	J	2.2	U	3.5	U
Aldrin	2.0	U	100	J	2.4	U	3.5	U	2.3	U	3.8	J	4.6	J	20	J	1.2	J	15	J
Heptachlor epoxide	2.0	U	2.4	U	2.4	U	1.7	J	2.3	U	6.1	J	11	J	20	J	2.2	U	29	J
Endosulfan I	2.0	U	2.4	U	2.4	U	3.5	U	2.3	U	2.1	U	2.1	U	8.0	J	2.2	U	3.5	U
Dieldrin	3.9	U	15	J	4.7	U	36	J	4.5	U	12	J	17	J	40	J	4.2	U	58	J
4,4'-DDE	3.9	U	4.7	U	4.7	U	6.5	J	4.5	U	4.0	U	4.1	U	69	J	4.2	U	130	J
Endrin	3.9	U	23	J	4.7	U	5.2	J	4.5	U	23	J	12	J	50	J	3.5	J	110	J
Endosulfan II	3.9	U	6.8	J	4.7	U	4.0	J	4.5	U	4.0	U	4.1	U	8.1	R	4.2	U	6.9	U
4,4'-DDD	3.9	U	19	J	4.7	U	6.9	U	4.5	U	10	J	14	J	17	J	1.6	J	13	J
Endosulfan sulfate	3.9	U	4.7	U	4.7	U	6.9	U	4.5	U	13	J	18	J	8.1	R	4.2	U	66	J
4,4'-DDT	3.9	U	20	J	4.7	U	6.9	U	4.5	U	34	J	47	J	42	J	4.2	U	6.9	U
Methoxychlor	20	U	24	U	24	U	35	U	23	U	21	U	21	U	41	R	22	U	35	U
Endrin ketone	3.9	U	9.8	J	4.7	U	140	J	4.5	U	6.2	J	9.6	J	46	J	4.2	U	150	J
Endrin aldehyde	3.9	U	4.7	U	4.7	U	86	J	4.5	U	22	J	32	J	8.1	R	1.8	J	52	J
alpha-Chlordane	2.0	U	59	J	2.4	U	40	J	2.3	U	6.0	J	9.7	J	4.2	R	2.2	U	150	J
gamma-Chlordane	2.0	U	41	J	2.4	U	1.8	J	2.3	U	6.2	J	9.9	J	28	J	2.2	U	520	
Toxaphene	200	U	240	U	240	U	350	U	230	U	210	U	210	U	410	R	220	U	350	U
Aroclor-1016	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1221	80	U	94	U	94	U	140	U	91	U	82	U	83	U	160	R	86	U	140	U
Aroclor-1232	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1242	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1248	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1254	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U
Aroclor-1260	39	U	46	U	46	U	69	U	45	U	40	U	41	U	80	R	42	U	69	U

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 7

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : EE01K
CLARK OIL
LIBRTY

Sample Number :	EE01Z		EE020		EE021		EE022		EE025		EE026		EE027		EE028		EE029		EE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Moisture :	27		25		6		15		22		21		24		39		26		26	
pH :	7.0		7.7		7.5		7.9		6.5		7.2		7.7		8.0		8.5		8.5	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
									Background											
Pesticide/PCB Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	2.3	U	2.2	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
beta-BHC	2.3	U	2.3	U	1.8	U	1.6	J	2.2	U	2.2	U	2.2	U	2.8	UJ	0.93	J	2.3	U
delta-BHC	2.3	U	2.0	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
gamma-BHC (Lindane)	2.3	U	4.0	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Heptachlor	2.3	U	2.3	U	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Aldrin	2.3	U	1.0	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Heptachlor epoxide	2.3	U	2.3	U	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Endosulfan I	2.3	U	2.3	U	1.8	U	0.52	J	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Dieldrin	4.5	U	1.5	J	3.5	U	19	J	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
4,4'-DDE	4.5	U	4.4	U	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endrin	4.5	U	4.0	J	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endosulfan II	4.5	U	4.4	U	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
4,4'-DDD	4.5	U	1.8	J	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endosulfan sulfate	4.5	U	4.4	U	3.5	U	25	J	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
4,4'-DDT	4.5	U	3.8	J	3.5	U	3.9	U	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Methoxychlor	23	U	15	J	18	U	51	J	22	U	22	U	22	U	28	UJ	23	U	23	U
Endrin ketone	4.5	U	3.6	J	3.5	U	84	J	4.2	U	4.2	U	4.3	U	5.4	UJ	4.5	U	4.5	U
Endrin aldehyde	4.5	U	1.7	J	3.5	U	10	J	4.2	U	4.2	U	4.3	U	5.4	UJ	1.7	J	4.5	U
alpha-Chlordane	2.3	U	1.6	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
gamma-Chlordane	2.3	U	1.5	J	1.8	U	2.0	U	2.2	U	2.2	U	2.2	U	2.8	UJ	2.3	U	2.3	U
Toxaphene	230	U	230	U	180	U	200	U	220	U	220	U	220	U	280	UJ	230	U	230	U
Aroclor-1016	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1221	92	U	89	U	71	U	79	U	86	U	85	U	88	U	110	UJ	91	U	91	U
Aroclor-1232	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1242	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1248	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1254	45	U	44	U	35	U	1600	J	42	U	42	U	43	U	54	UJ	45	U	45	U
Aroclor-1260	45	U	44	U	35	U	39	U	42	U	42	U	43	U	54	UJ	45	U	45	U

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 8

Analytical Results (Qualified Data)

Case #: 28678
Site : CLARK OIL
Lab. : LIBRTY
Reviewer : J. GANZ
Date : DECEMBER 12, 2000

Sample Number :	MEE01B		MEE01C		MEE01D		MEE01E		MEE01F		MEE01G		MEE01H		MEE01J		MEE01K		MEE01L	
Sampling Location :	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/1/00		11/2/00		11/2/00	
Time Sampled :	11:30		11:30		12:50		13:10		15:00		15:20		16:00		16:45		08:15		09:25	
%Solids :	99.1		66.9		84.4		77.2		73.4		76.6		81.1		75.9		74.4		83.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	192		12200		9410		4020		12700		9280		7860		8660		12600		9740	
ANTIMONY	0.44	UJ	0.65	UJ	1.6	J	0.59	UJ	0.62	UJ	0.56	UJ	0.57	J	0.96	J	0.68	J	0.78	J
ARSENIC	0.65	UJ	6.0	J	9.3	J	1.8	J	5.8	J	4.2	J	7.5	J	7.8	J	5.9	J	8.4	J
BARIUM	5.3		164		300		235		213		269		157		184		157		276	
BERYLLIUM	0.038	U	1.0		0.96		0.28	J	0.81		0.72		0.60		0.60		0.83		0.72	
CADMIUM	0.057	U	0.31	J	0.70		0.077	U	0.081	U	0.20	J	0.45	J	0.078	U	0.075	U	0.097	J
CALCIUM	1810	J	7260	J	51700	J	18600	J	5410	J	4480	J	3610	J	4520	J	4940	J	6280	J
CHROMIUM	1.8	J	17.5	J	190	J	7.6	J	14.3	J	14.8	J	12.4	J	14.7	J	14.8	J	15.1	J
COBALT	0.20		7.3		6.1		5.4		8.7		7.4		9.7		8.8		13.5		6.2	
COPPER	4.2		36.0		73.9		10.1		23.1		22.0		22.9		22.3		22.3		179	
IRON	447		16200		31400		8320		18300		13900		17200		19800		17500		14400	
LEAD	2.7	J	21.7	J	111	J	7.5	J	13.5	J	23.8	J	15.5	J	13.1	J	17.9	J	375	J
MAGNESIUM	209		3960		6930		6890		3170		2600		3150		3920		3280		2850	
MANGANESE	49.7	J	334	J	2110	J	271	J	646	J	481	J	699	J	167	J	615	J	429	J
MERCURY	0.058	J	0.21	J	0.13	J	0.088	J	0.10	J	0.097	J	0.070	J	0.091	J	0.090	J	0.14	J
NICKEL	1.6	J	21.8	J	70.4	J	14.7	J	20.5	J	16.1	J	31.1	J	27.6	J	20.4	J	16.6	J
POTASSIUM	44.2		1950		1680		1100		1130		1480		930		935		1130		1280	
SELENIUM	0.82	UJ	1.2	J	0.99	UJ	1.1	UJ	1.2	UJ	1.0	UJ	0.98	UJ	2.1	J	1.1	UJ	1.7	J
SILVER	0.076	U	0.11	U	0.33		0.10	U	0.11	U	0.098	U	0.091	U	0.10	U	0.10	U	0.094	U
SODIUM	115	J	553	J	479	J	269	J	232	J	260	J	209	J	253	J	283	J	346	J
THALLIUM	1.1	UJ	9.3	J	12.9	J	4.3	J	9.7	J	8.6	J	11.2	J	13.4	J	9.7	J	8.1	J
VANADIUM	7.0		29.1		57.2		14.9		21.8		27.3		25.1		27.4		25.1		26.2	
ZINC	6.4	J	83.7	J	580	J	35.2	J	58.8	J	64.4	J	55.1	J	59.2	J	57.8	J	66.8	J
CYANIDE	0.045	U	0.11	J	0.23	J	0.056	U	0.060	J	0.057	U	0.076	J	0.058	U	0.10	J	0.12	J

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES
TABLE 8

Analytical Results (Qualified Data)

Case #: 28678
Site : CLARK OIL
Lab. : LIBRTY
Reviewer : J. GANZ
Date : DECEMBER 12, 2000

Sample Number :	MEE01M		MEE01N		MEE01P		MEE01Q		MEE01R		MEE01S		MEE01T		MEE01W		MEE01X		MEE01Y	
Sampling Location :	X111		X112		X113		X114		X115		X116		X117		X118		X119		X120	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	11/2/00		11/2/00		11/2/00		11/2/00		11/2/00		11/2/00		11/2/00		11/2/00		11/2/00		11/2/00	
Time Sampled :	09:35		10:05		11:05		12:00		12:15		13:25		13:25		14:20		14:35		15:40	
%Solids :	81.3		62.4		74.2		80.2		73.9		79.4		78.4		78.5		75.1		76.3	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	6840		952		11800		193		15100		9460		24600		448		11000		8240	
ANTIMONY	0.53	UJ	26.5	J	0.71	J	0.57	UJ	0.65	J	0.64	J	1.2	J	0.83	J	0.57	UJ	1.0	J
ARSENIC	5.9	J	2.4	J	3.7	J	1.0	J	5.2	J	5.4	J	14.2	J	2.0	J	6.1	J	9.1	J
BARIUM	164		34.4		842		66.0		247		238		197		14.6		317		155	
BERYLLIUM	0.43		0.10	J	0.77		0.049	U	1.0		0.64		0.76		0.049	U	0.63		0.46	
CADMIUM	0.070	U	26.8		0.17	J	0.074	U	0.080	U	0.10	J	0.076	U	0.074	U	0.074	U	0.079	U
CALCIUM	2950	J	11100	J	4120	J	3150	J	5580	J	23300	J	17600	J	7600	J	3680	J	15900	J
CHROMIUM	11.3	J	196	J	14.1	J	5.0	J	16.6	J	126	J	127	J	24.2	J	16.7	J	76.6	J
COBALT	6.1		2.8		37.0		0.96		9.0		9.1		8.9		1.8		6.5		32.0	
COPPER	14.7		333		21.8		12.4		26.0		28.1		39.9		18.1		19.8		57.5	
IRON	13500		4670		13900		1430		20300		16000		16800		26500		17800		19800	
LEAD	9.0	J	172	J	17.6	J	22.2	J	12.6	J	39.3	J	88.8	J	7.7	J	13.4	J	84.1	J
MAGNESIUM	2920		2410		3420		868		3830		3900		6100		875		3720		3160	
MANGANESE	229	J	74.3	J	3900	J	22.7	J	599	J	583	J	544	J	113	J	436	J	316	J
MERCURY	0.098	J	0.37	J	0.073	J	0.081	J	0.069	J	0.11	J	0.13	J	0.092	J	0.11	J	0.21	J
NICKEL	18.8	J	70.2	J	29.9	J	3.1	J	21.9	J	24.7	J	26.4	J	24.9	J	20.8	J	65.4	J
POTASSIUM	784		120		993		42.2		1290		1180		1490		95.5		1250		874	
SELENIUM	1.0	UJ	3.0	J	1.1	UJ	1.1	UJ	1.2	UJ	2.6	J	1.5	J	9.6	J	1.1	UJ	1.7	J
SILVER	0.093	U	1.0		0.11	U	0.18		0.11	U	0.099	U	0.10	U	0.15		0.099	U	0.10	U
SODIUM	262	J	298	J	1040	J	224	J	260	J	268	J	349	J	246	J	328	J	494	J
THALLIUM	7.8	J	3.1	J	7.0	J	1.4	UJ	9.9	J	7.7	J	7.1	J	14.9	J	10.3	J	11.6	J
VANADIUM	19.2		403		23.4		5.3		29.5		63.6		70.1		334		27.5		53.5	
ZINC	44.2	J	2480	J	44.5	J	39.1	J	55.0	J	139	J	217	J	33.8	J	62.2	J	95.9	J
CYANIDE	0.055	U	0.64		0.082	J	0.49		0.076	J	0.39	J	0.41	J	2.8		0.059	U	3.5	

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

HARTFORD, ILLINOIS

KEY SAMPLES

TABLE 8

Analytical Results (Qualified Data)

Case #: 28678
Site :
Lab. :
Reviewer :
Date :

SDG : MEE01B
CLARK OIL
LIBRTY
J. GANZ
DECEMBER 12, 2000

Sample Number :	MEE01Z		MEE020		MEE021		MEE022		MEE025		MEE026		MEE027		MEE028		MEE029		MEE02A	
Sampling Location :	X121		X122		X123		X124		X125		X126		X127		X128		X129		X130	
Matrix :	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	11/02/2000		11/02/2000		11/02/2000		11/02/2000		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00		11/9/00	
Time Sampled :	15:50		16:50		16:55		17:10		10:00		10:25		12:00		12:15		15:45		16:00	
%Solids :	88.0		83.2		95.2		74.8		76.2		83.8		75.6		70.8		76.9		74.1	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
									Background											
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	3950		5200		1630		5620		11400		4280		14400		14100		14700		6860	
ANTIMONY	0.52	UJ	0.53	UJ	0.45	UJ	0.58	UJ	0.61	J	0.51	R	0.64	J	0.65	R	0.60	R	0.65	J
ARSENIC	0.77	U	0.78	U	0.66	U	4.0	J	3.3		0.75	U	7.4		7.8		5.3		5.0	
BARIUM	40.6		56.5		26.6		125		171		50.1		187		322		256		161	
BERYLLIUM	0.17	J	0.24	J	0.090	J	0.59		0.83		0.35	J	0.93		1.0		0.87		0.51	J
CADMIUM	0.070	U	0.070	U	0.060	U	0.43	J	0.080	U	0.070	U	0.16	J	0.15	J	0.080	U	0.080	U
CALCIUM	879		2320		556		149000		4230		1560		11300		9900		7750		23900	
CHROMIUM	6.9		9.3		5.7		47.1		15.8		7.8		86.0		18.1		17.3		11.4	
COBALT	2.9		3.6		3.0		7.1		5.6		3.8		9.1		8.6		8.1		8.4	
COPPER	7.3		9.9		4.0		45.1		20.1		8.1		25.2		26.9		25.4		16.3	
IRON	4690		7740		3480		12500		16400		7740		23300		21900		19900		17300	
LEAD	4.3		7.4		2.7		73.7		20.6		5.9		45.2		18.7		21.5		13.8	
MAGNESIUM	972		1400		633		7220		2630		1470		3860		5190		4130		8360	
MANGANESE	30.6		228		34.9		418		372		48.4		825		473		601		516	
MERCURY	0.090	J	0.10	J	0.070	J	0.16	J	0.10	J	0.050	J	0.18	J	0.10	J	0.070	J	0.090	J
NICKEL	7.9		10.8		8.1		19.8		14.9	J	9.9	J	22.3	J	23.3	J	21.7	J	21.6	J
POTASSIUM	372		643		140		1180		1090	J	422	J	1420	J	2370	J	1470	J	1320	J
SELENIUM	0.98	UJ	0.98	UJ	0.84	UJ	1.1	UJ	1.5	J	1.6	J	1.8	J	1.2	UJ	1.1	UJ	1.2	UJ
SILVER	0.090	U	0.090	U	0.080	U	0.10	U	0.10	U	0.090	U	0.10	U	0.11	U	0.10	U	0.11	U
SODIUM	207	J	344	J	167	J	353	J	195	J	206	J	346	J	354	J	377	J	443	J
THALLIUM	3.3	J	5.3		2.0	J	3.0	J	11.7		5.0	J	15.4		13.3		13.2		9.9	
VANADIUM	12.2		12.0		10.4		25.2		25.6		13.3		34.9		34.7		30.5		21.7	
ZINC	16.3		27.6		10.2		427		66.7		25.1		92.4		70.5		62.1		48.3	
CYANIDE	0.050	U	0.050	U	0.050	U	0.060	U	*		*		*		*		*		*	

* -- No results reported from Laboratory.

Highlighted entries are at least three times background, some will be ten times background if background level is estimated.

CLARK OIL & REFINING COMPANY

SAMPLE DESCRIPTIONS

Table 9

SAMPLE	DEPTH	APPEARANCE	TVA READINGS (units) PID	FID	LOCATION
X101	0.0' - 0.5'	Tar like substance.	9	25	Hawthorne St. west of levee just south of old waste water lagoon #1.
X102	9' - 11'	Med. tan silty clay, hydrcarbon odor.	8	44	Deep sample in above location.
X103	1' - 3'	Lt. tan, sandy, silty loam w/ gravel	1	3	Center of old Clark Oil dump, now used by Hartford for dirt, rock, concrete, etc.
X104	13' - 15'	Med. grey, clayey, silt.	12.5	51	Deep sample in above location.
X105	1' - 2.5'	Cinders at top, then black clay w/ some silt.	3.5	22	North of former TEL building
X106	9' - 11'	Dk. grey-green grey silt w/ v. f. sand.	92	900	Deep sample in above location.
X107	1' - 2.5'	Dk. grey - black, silty clay	20	1400	Within bermed containment area of tank 35-1 & 35-2.
X108	4' - 6'	Med. grey silty clay	11	315	Within bermed containment area of tank 162 (formerly 10-2).
X109	1' - 3'	Dk. brown-Dk. grey silty clay	4 Ambient air in bore hole	570	Near NE corner of south tank farm south of Hawthorne St.
X110	1' - 3'	Med.-Dk. grey clay.	42	50	North of drum accumulation/storage area in central portion of site.
X111	9' - 11'	Grey green silt w/clay.	20	150	Deep sample in above location.
X112	0.5' - 1'	Black stained, oily, silty clay.	17	7	Outside of SW corner of concrete containment wall of tank TI-18.
X113	1' - 3'	Med. grey clay w/ some silt.	12	2	NE corner of bermed containment area of tank 120-2.
X114	0.0' - 0.5'	Leaded Tank Bottom material Black, stiff, slightly oily.	NA	NA	SE corner of leaded tank bottom pit.
X115	6' - 8'	Med. grey-greenish grey silt.	40	12	South of leaded tank bottom pit.

CLARK OIL & REFINING COMPANY

SAMPLE DESCRIPTIONS (cont.)

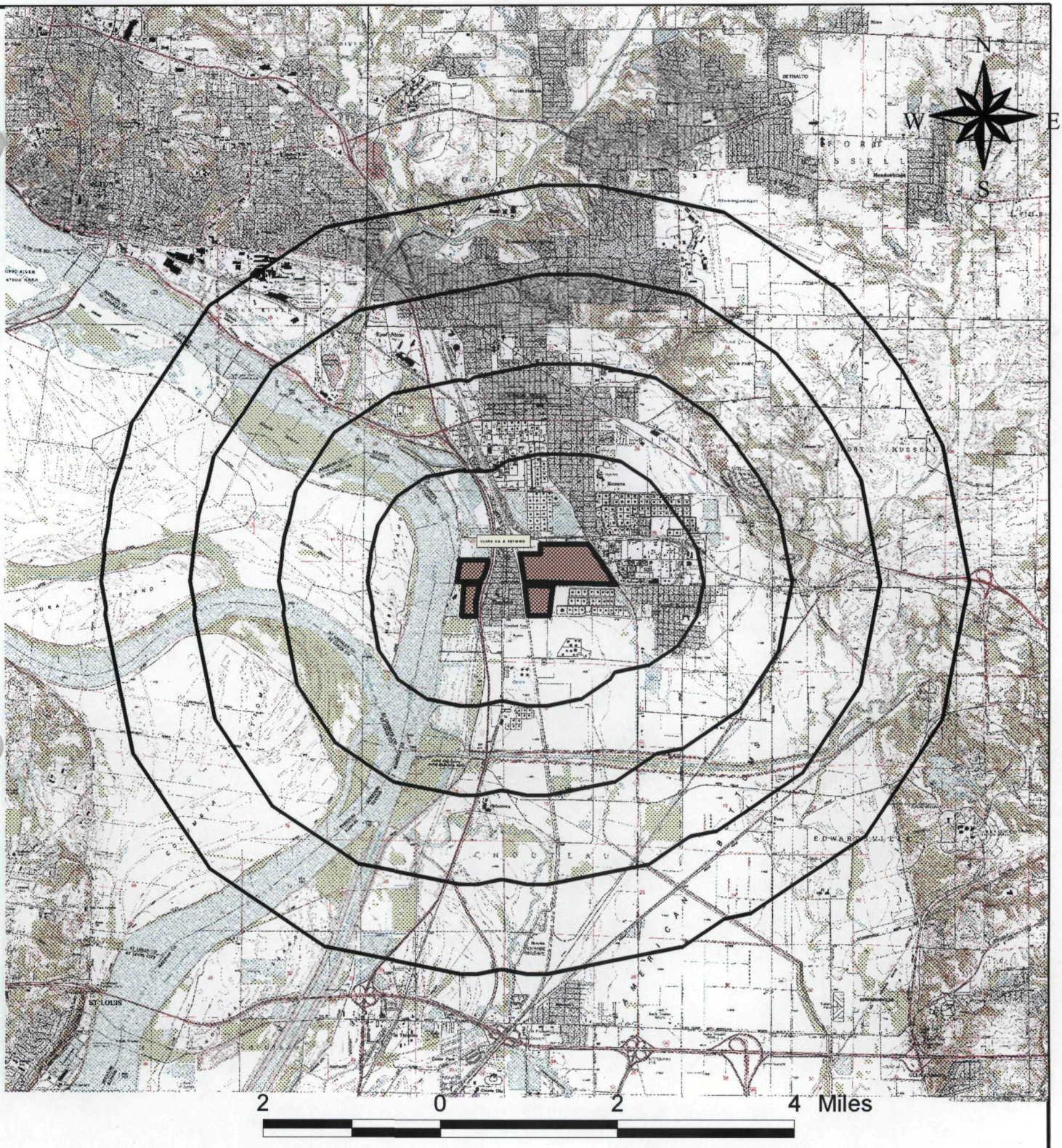
Table 9

SAMPLE	DEPTH	APPEARANCE	TVA READINGS (units) PID	FID	LOCATION
X116/X117 (Dup of X116)	0.0' - 0.5'	Med.-Dk. brown silty, sandy clay.	NA	NA	In drainage accumulation ditch SE of old (short) flare stack.
X118	1' - 3'	Black fines of petroleum coke.	19	NA	SW corner of unused area east of coking area.
X119	8' - 10'	Med. grey clay mixed w/ yellow brown clay.	46	NA	Deep sample in above location.
X120	1' - 4'	Fill & gravel to 3', then black silty clay.	39	NA	Just west of NW corner of Guard Basin in SE corner of site.
X121	14' - 16'	Olive brown clay to 14.5', then grey brown, med.-fine, sand w/ silt.	18	NA	Deep sample in above location.
X122	8' - 10'	Tan sand at top, then olive brown clay.	NA	NA	NE corner of site.
X123	18' - 20'	Med.-course brown sand.	NA	NA	Deep sample in above location.
X124	0.0' - 0.5'	Med. brown, sandy, silty loam. very fine silty sand. Moist.	NA	NA	Adjacent to NE corner of old API separator north of guard basin.
X125	1' - 3'	Med.-Dk. brown, silty, clay	NA Too wet & humid for TVA	NA	East of Roxana Water treatment Bldg. east of Route 111.
X126	13' - 15'	Fine sandy silt from 12' - 14.5', then med.-course tan sand.	NA	NA	Deep sample in above location.
X127	2' - 4'	Dk. brown-Dk. grey clay.	NA Too wet & humid for TVA	NA	West of levee, west of old waste water lagoon #2, north of Hawthorne St.
X128	14.5' - 16'	Dk. grey clay, petroleum odor & stain.	NA	NA	Deep sample in above location.
X129	2' - 4'	Gravel from 0.0'-3.0', then Dk. brown-Dk. grey clay.	NA Too wet & humid for TVA	NA	Immediately west of Bio-unit/API separator, west side of site.
X130	14' - 16'	Dk. grey-black,silty clay, petroleum odor and stains.	NA	NA	Deep sample in above location

APPENDICES

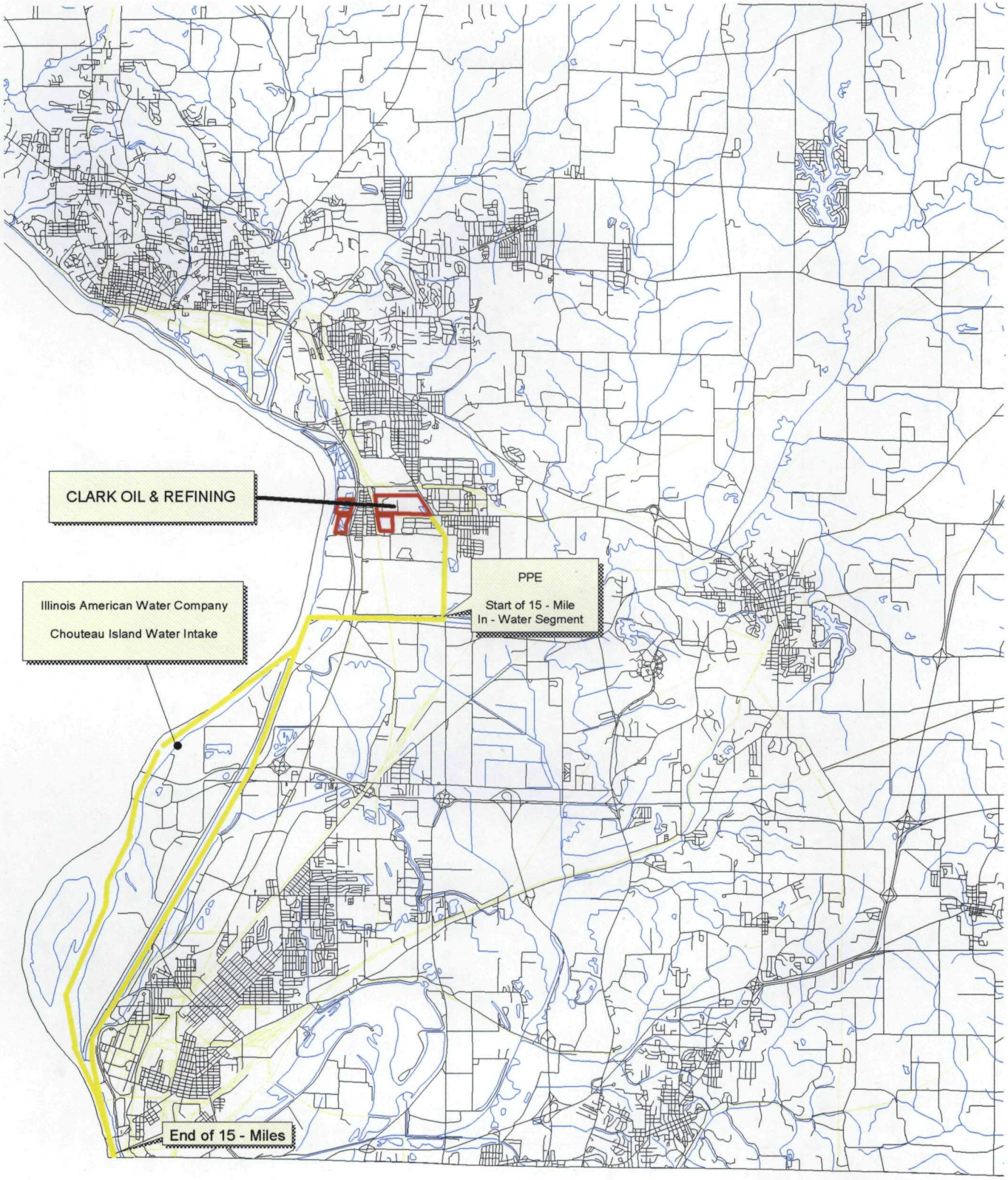
Appendix A

4-Mile Radius Map
&
15-Mile Surface Water Route Map



CLARK OIL & REFINING

4 - Mile Radius Map



15 - MILE

SURFACE WATER MAP

Appendix B

Target Compound List

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chlorde	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroehtene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether

Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

TARGET ANALYTE LIST

Inorganic Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobolt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

List of PNA's from Target Compound List

Naphthalene

2-Methylnaphthalene

2-Chloronaphthalene

Acenaphthylene

Acenaphthene

Fluorene

Phenanthrene

Anthracene

Fluoranthene

Pyrene

Benzo(a)anthracene

Chrysene

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Benzo(a)pyrene

Indeno(1,2,3-cd)pyrene

Dibenz(a,h)anthracene

Benzo(g,h,i)perylene

Appendix C

Illinois EPA Sample Photographs

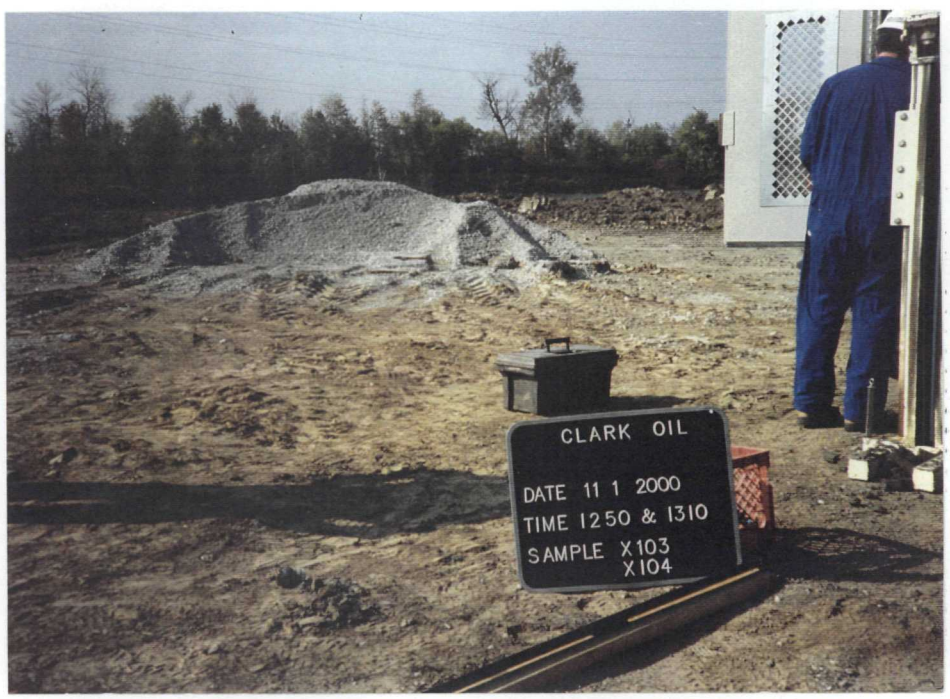
SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 1,2000
TIME: 1130
PHOTO BY: Ken Corkill
SAMPLE: X101 & X102
DIRECTION: North
COMMENTS: Photo taken of soil sample location between old wastewater lagoons.

DATE: November 1, 2000
TIME: 1130
PHOTO BY: Ken Corkill
SAMPLE: X101 & X102
DIRECTION: South
COMMENTS: Photo taken of soil sampling location between old wastewater lagoons.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 1, 2000
TIME: 1250 & 1310
PHOTO BY: Ken Corkill
SAMPLE: X103 & X104
DIRECTION: West
COMMENTS: Photo taken of soil sample location in old dump area south of old wastewater lagoons.



DATE: November 1, 2000
TIME: 1250 & 1310
PHOTO BY: Ken Corkill
SAMPLE: X103 & X104
DIRECTION: SE
COMMENTS: Photo taken of soil sample location in old dump area south of old wastewater lagoons.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 1, 2000
TIME: 1500 & 1520
PHOTO BY: Ken Corkill
SAMPLE: X105 & X106
DIRECTION: SSE
COMMENTS: Photo taken of soil sample location north of TEL building.

DATE: November 1, 2000
TIME: 1500 & 1520
PHOTO BY: Ken Corkill
SAMPLE: X105 & X106
DIRECTION: NNW
COMMENTS: Photo taken of soil sample location north of TEL building.

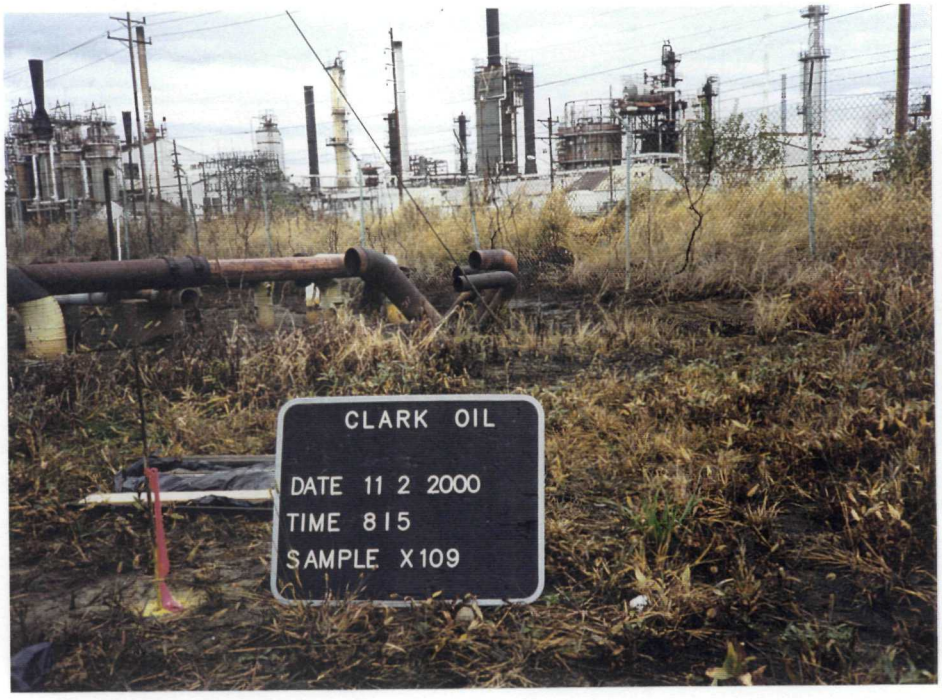
SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 1, 2000
TIME: 1600
PHOTO BY: Ken Corkill
SAMPLE: X107
DIRECTION: East
COMMENTS: Photo taken of soil sample location containment area of tank 35-1 & 35-2.

DATE: November 1, 2000
TIME: 1645
PHOTO BY: Ken Corkill
SAMPLE: X108
DIRECTION: SW
COMMENTS: Photo taken of soil sample location in containment area of tank 162 (formerly tank 10-2).

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

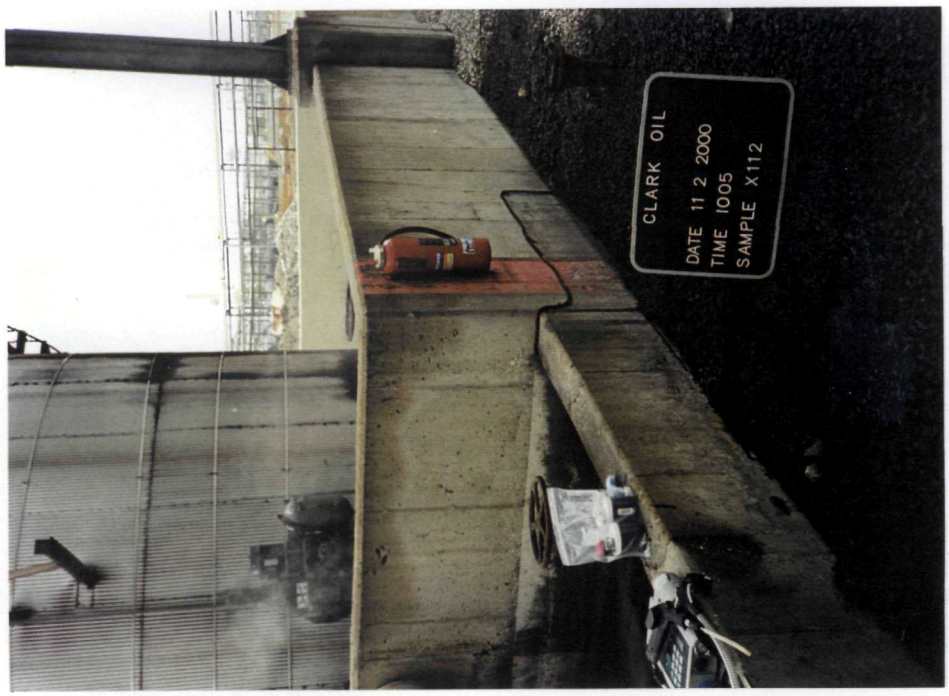
DATE: November 2, 2000
TIME: 0815
PHOTO BY: Ken Corkill
SAMPLE: X109
DIRECTION: NW
COMMENTS: Photo taken of soil sample location in south tank farm east of transfer piping.



DATE: November 2, 2000
TIME: 0925 & 0935
PHOTO BY: Ken Corkill
SAMPLE: X110 & X111
DIRECTION: SSE
COMMENTS: Photo taken of soil sample location in near center of the refinery north of drum accumulation area.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

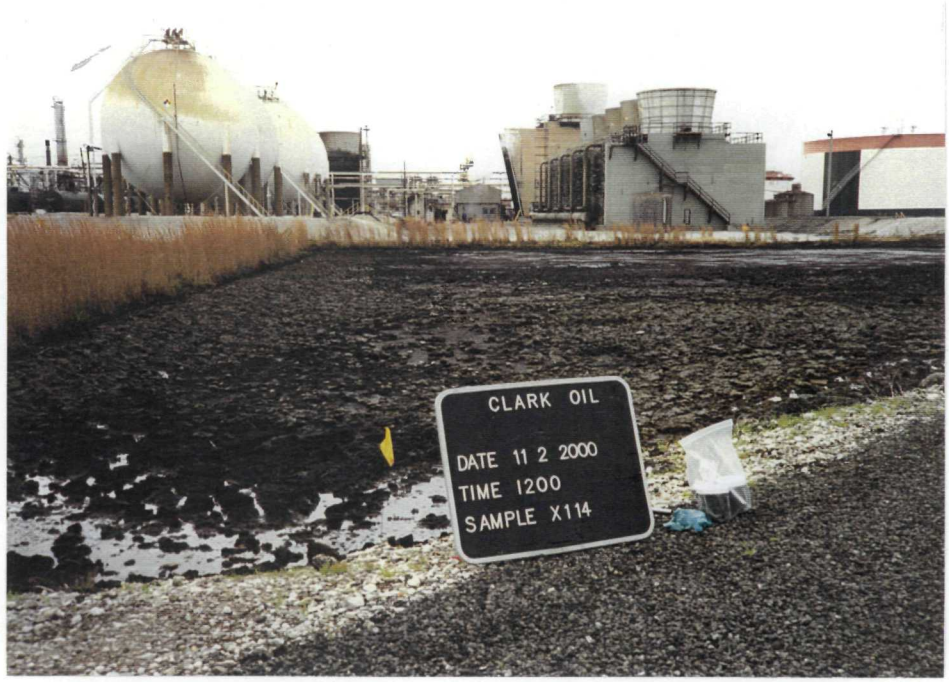
DATE: November 2, 2000
TIME: 1005
PHOTO BY: Ken Corkill
SAMPLE: X112
DIRECTION: NE
COMMENTS: Photo taken of soil sample location outside of containment structure of tank TI-18.



DATE: November 2, 2000
TIME: 1105
PHOTO BY: Ken Corkill
SAMPLE: X113
DIRECTION: SW
COMMENTS: Photo taken of soil sample location in NE corner of containment area of tank 120-2.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 2, 2000
TIME: 1200
PHOTO BY: Ken Corkill
SAMPLE: X114
DIRECTION: West
COMMENTS: Photo taken of waste sample location in leaded tank bottom pit.



DATE: November 2, 2000
TIME: 1215
PHOTO BY: Ken Corkill
SAMPLE: X115
DIRECTION: NW
COMMENTS: Photo taken of soil sample location just south of the leaded tank bottom pit.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

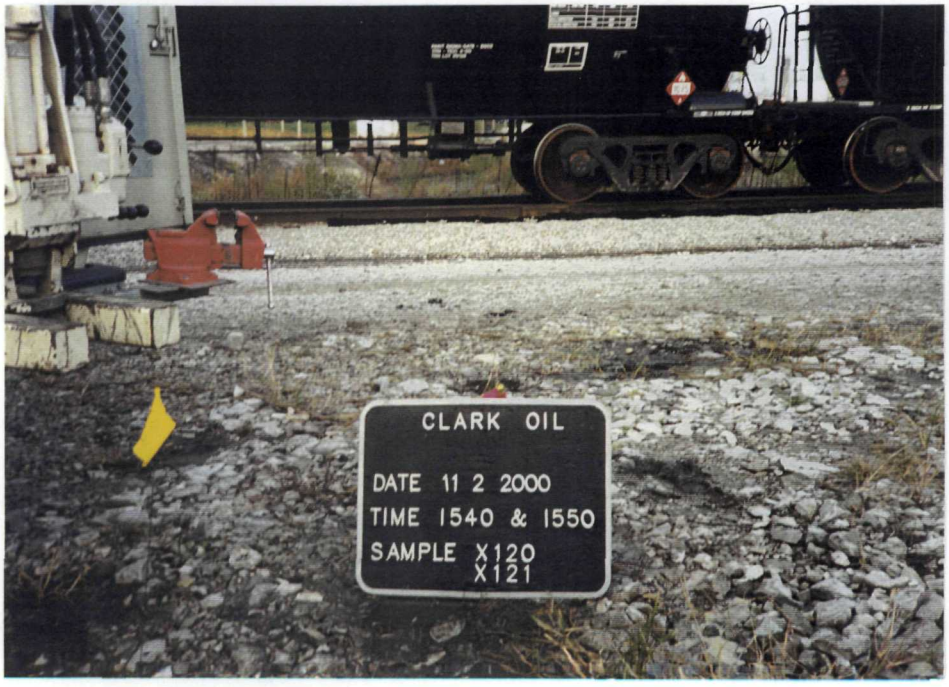
DATE: November 2, 2000
TIME: 1325
PHOTO BY: Ken Corkill
SAMPLE: X116 & X117
DIRECTION: SSE
COMMENTS: Photo taken of soil sample location at head of drainage ditch SE of old (short) flare stack.

DATE: November 2, 2000
TIME: 1420 & 1435
PHOTO BY: Ken Corkill
SAMPLE: X118 & X119
DIRECTION: NE
COMMENTS: Photo taken of soil sample location in SW corner of unused area east of coke units.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 2, 2000
TIME: 1420 & 1435
PHOTO BY: Ken Corkill
SAMPLE: X118 & X119
DIRECTION: West
COMMENTS: Photo taken of soil sample location in SW corner of unused area east of coke units.

DATE: November 2, 2000
TIME: 1540 & 1550
PHOTO BY: Ken Corkill
SAMPLE: X120 & X121
DIRECTION: East
COMMENTS: Photo taken of soil sample location near NW corner of Guard Basin.



SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 2, 2000
TIME: 1540 & 1550
PHOTO BY: Ken Corkill
SAMPLE: X120 & X121
DIRECTION: WNW
COMMENTS: Photo taken of soil sample location near NW corner of Guard Basin.

DATE: November 2, 2000
TIME: 1650 & 1655
PHOTO BY: Ken Corkill
SAMPLE: X122 & X123
DIRECTION: NE
COMMENTS: Photo taken of soil sample location near NE corner of refinery.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 2, 2000
TIME: 1650 & 1655
PHOTO BY: Ken Corkill
SAMPLE: X122 & X123
DIRECTION: West
COMMENTS: Photo taken of soil sample location in the NE corner of refinery.

DATE: November 2, 2000
TIME: 1710
PHOTO BY: Ken Corkill
SAMPLE: X124
DIRECTION: SW
COMMENTS: Photo taken of soil sample location adjacent to old API separator north of Guard Basin.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 9, 2000
TIME: 1000 & 1025
PHOTO BY: Ken Corkill
SAMPLE: X125 & X126
DIRECTION: NW
COMMENTS: Photo taken of background soil sample location at rear of Roxana Water Dept. building.

DATE: November 9, 2000
TIME: 1000 & 1025
PHOTO BY: Ken Corkill
SAMPLE: X125 & X126
DIRECTION: NE
COMMENTS: Photo taken of background soil sample location at rear of Roxana Water Dept. building.

SITE NAME: CLARK OIL & REFINING	
CERCLIS ID: ILD 041869023	**COUNTY:** MADISON

DATE: November 9, 2000
TIME: 1200 & 1215
PHOTO BY: Ken Corkill
SAMPLE: X127 & X128
DIRECTION: East
COMMENTS: No photo. Soil sample location west of old wastewater lagoons #2.

DATE: November 9, 2000
TIME: 1530 & 1545
PHOTO BY: Ken Corkill
SAMPLE: X129 & X130
DIRECTION: NE
COMMENTS: No photo. Soil sample location immediately west of Bio-unit & API Separator.

Appendix D

Expanded Site Inspection Analytical Results

See Volume II of the ESI Report